ESTABLISHED 1861

OLDEST BEE-PAPER IN AMERICA.

THE AMERICAN BEE JOURNAL.

DEVOTED EXCLUSIVELY TO BEE-CULTURE

Vol. XXXIV. No. 1.

July 5th, 1894.

MASSACHUSETTS

PUBLISHED WEEKLY.

BY

GEORGE W. YORK & CO.,

One Dollar a Year.

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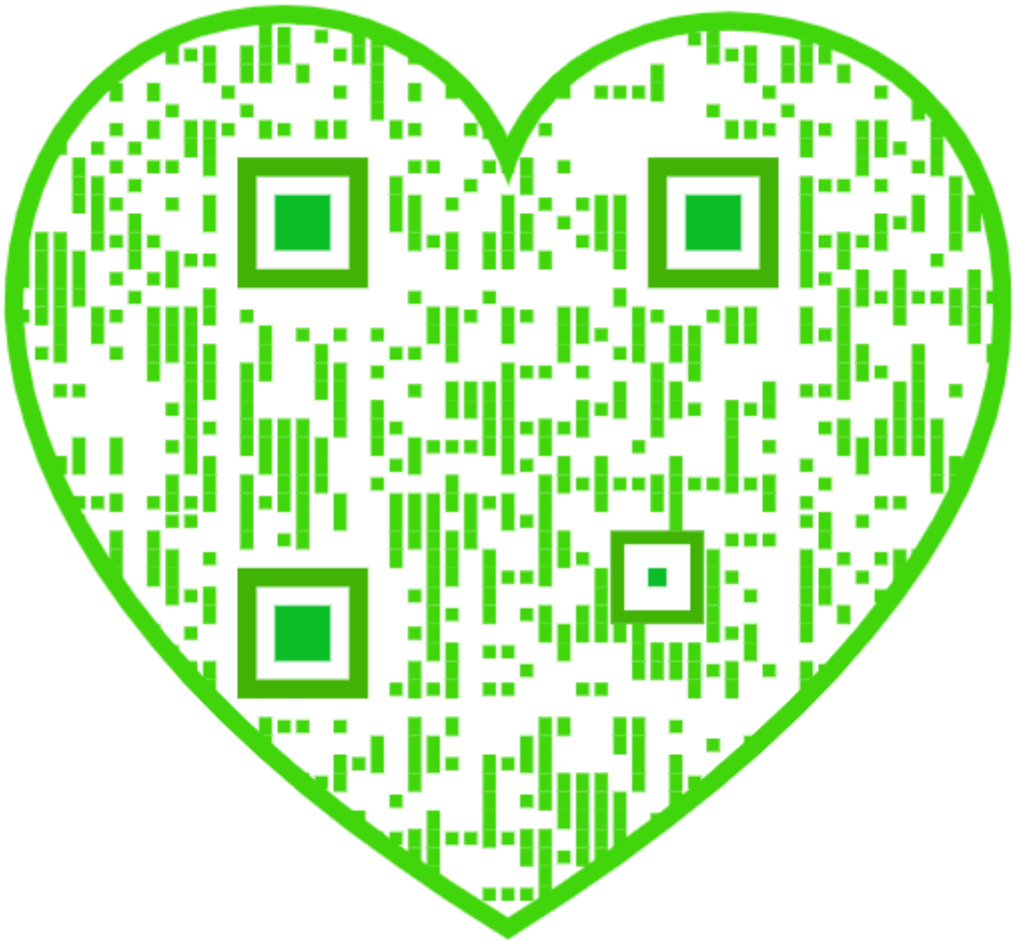

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56 Fifth Avenue, CHICAGO, ILLS.

Entered at the Post-Office at Chicago as Second-Class Matter.

Postage to all Countries in the Postal Union is **50** cents extra. To all others, **$1.00** more than the subscription price.

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The American Bee Journal.....	$1 00....	
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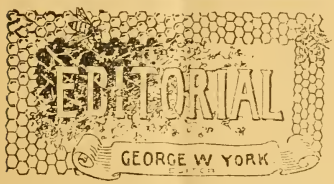


Foreign Bee-Papers are to be "extracted" and translated for the *Review* hereafter by Miss Katherine M. Inglis, of Michigan, a niece of Hon. R. L. Taylor. The first installment appeared in the June issue of Bro. Hutchinson's paper, and is exceedingly readable.

Rev. S. Roese, of Maiden Rock, Wis., writes us that he had a second attack of la grippe last winter, and besides a daughter was also sick all the winter. Verily, misfortunes come not singly. Bro. Roese has sent a short article on "Renewing Brood-combs," which will appear soon.

The Practical Bee-Keeper, the new bee-paper in Canada, published by C. A. Ouellette, was recently changed from a quarterly to a monthly. Bro. Allen Pringle, who so successfully superintended the Ontario apiarian exhibit at the World's Fair, last year, is one of the *Practical's* regular correspondents, as shown by the May and June numbers. Bro. Pringle is a splendid writer, on bees or any other subject, and we always read with much interest what he has to say, even if we don't always agree with his views on some matters outside of apiculture.

Prof. Cook's Class in apiculture, we are glad to learn, numbers 17. He wrote us thus about it recently:

> I have a class of 17 in apiculture. How is that? Many of them handle bees already like veterans (both gentlemen and ladies), with no hat or gloves, with hands full of bees. I shall make some good bee-keepers here. A. J. COOK.

We think the Professor is meeting with excellent success in getting such a large class interested in handling bees, and learning about their useful habits. It will pay young people to avail themselves of the opportunity now afforded at Claremont, Calif., to obtain apicultural knowledge. Prof. Cook knows the "how" and "why" about bees and several other things.

Bro. Holtermann's wife and four bright children (two boys and two girls) were all shown in the *Canadian Bee Journal* for June. What a happy looking family it is! And how proud of them "ye editor" of the *Canadian* must be! Perhaps the following stanza, taken from the same number, explains the secret of Bro. Holtermann's apparent domestic felicity:

> "Eternal is the peace that dwells
> Where Love's soft footsteps ever fall;
> The heart and soul the story tell—
> Love is the ruler over all."

Frame-Spacers.—Mr. J. W. Tefft, of New York, has sent us samples of the frames which he uses, on which are projections right at the four corners, which serve as self-spacers. They are made by leaving the *ends* of the end-bars and top and bottom bars $\frac{3}{8}$ inch wider, $\frac{1}{4}$ inch from the ends, and thus when nailed together they

space exactly 1⅛ inches from center to center, as the rest of the frame is 1⅛ inches wide. They can also be reversed if desired. The frames are 10x15 inches, inside measurement. Mr. Tefft claims that he secures one-third more honey by their use than by any other system. He has special size sections in each frame, as they can be used as wide-frames, brood-frames, or extracting-frames.

Mr. Tefft suggests that the Stephens' frame-spacer, as illustrated on page 727, may be an infringement upon his patent. We hardly think so, though of course we would not assume to say positively.

Mr. T. C. Kelly, of Pennsylvania, has also sent us a sample of metal device which he uses to space the frames at the top—something to fasten on the hive-rabbet, and into which the frame ends drop, thus spacing them accurately and regularly. Mr. Kelly also wished to know whether there was any infringement, but *we* again do not think there is.

☞ Our advice is to extract only from sealed, or nearly all sealed combs. By so doing we get a first-class product that we can recommend, and that should sell for as much, pound for pound, as comb honey. There is good reason to believe that the producing of a cheap, inferior-flavored article has nearly ruined many markets for the sale of extracted honey.—*Dr. Tinker.*

A Naughty "Not."—In a recent number of *Gleanings*, Dr. Miller, in speaking of T supers compared with wide-frames, meant to say, "I feel almost sure *there's* something I *do know* about." Well, the printer got it "do *not* know," which isn't to be wondered at when we remember how often Dr. Miller says he "don't know." And now the Doctor threatens to "cripple that printer" for putting in the word "not," but Bro. Root takes the blame for the error, and sympathetically remarks about it thus:

> Our mistake, Doctor. By the way, what a pity it is that we cannot take that word which we did *not* want, and give it to Bro. York to put in the first line on page 648 of his issue for May 24! Bro. Y. never meant to say that "the kee-keeping world *can* spare Dr. Miller just yet." It's a naughty *not*.

You're just right, Bro. Root, it *is* a "naughty *not*"—a good deal like a Chicago policeman—when you want him he's nowhere to be found, and when you don't want him he's right there. So with the word "not"—when you want it not, behold it's there; when you do want it, it's not in its place. Let us hope it will *not* cause the Doctor, or his friends, any more trouble.

Our Visit to Dr. Miller's.—As promised last week, we will now try to tell something about our trip and visit to the home of Dr. Miller.

We left the BEE JOURNAL office at 10 o'clock, a.m., on Saturday, June 16th, and arrived at Marengo a few minutes after 1 p.m., on the Chicago & Northwestern railroad, just 66 and a fraction miles northwest of Chicago. We had understood that Dr. Miller lived 65 miles from Chicago, but he insisted that it is "66 and a fraction miles," and so we state it just as he informed us, for that seemed to be one of the many things he *knows*.

It was a most delightful ride after the splendid rain the previous night all the way along until only a few miles this side of Marengo, where it had not rained, and at Marengo it was fearfully dry and dusty. The Doctor said it hadn't rained for a month, and all vegetation gave ample proof of the truth of his words.

Just as the train "slowed up" at our destination, we saw Dr. Miller through the car window, apparently looking for a young man about our size. He was dressed—well, of course he was *dressed*—but Dr. Miller is a man who believes in dressing so as to be *comfortable*—and so do we. It was a very hot day, and he was in his apiary uniform excepting the bee-veil. It reminded us of the easy and comfortable outfit that *we* used to wear when living on the farm, viz: Hat, shirt, overalls, shoes. There you have it. Who wouldn't be cool and good-natured in such a rig, even on a hot day?

Just a mile south of Marengo is the Doctor's home. He drove a little out of the way in order to show us some fine basswood trees filled with buds that would bloom in about two weeks. There are a number of these rich honey-producing trees in and around Marengo, and doubtless the Doctor's bees keep good watch of them. The house, in which resides the "sage of Marengo," is situated perhaps 40 rods from

the main highway; and along one side of the driveway up to the house is a row of fine young basswood trees, nearly all of which were just covered with buds. These the Doctor had set out himself, as he did all the fruit and other trees growing on his place of 37½ acres.

Arrived finally at the Doctor's home, we were met at the door by his good wife and Miss Wilson, who, as is well known, is Dr. Miller's efficient helper in all his apiary work. The Doctor's son, Charles, perhaps 25 years of age, was also at home.

After partaking of a bountiful dinner—such as only people living in the country are permitted to enjoy—and then visiting a little, about 4 p.m. the Doctor, Miss Wilson and "ye editor" went into the home apiary. This apiary contains about 70 colonies of bees some five rods from the house, while the two out-apiaries, several miles away, have about 120 colonies.

Before leaving the house, Miss Wilson got the bee-hats with the veils as described in her article in the BEE JOURNAL of two weeks ago. The method of holding the veil down so that no bees may get under it, is Miss Wilson's own idea (not patented, we believe!). From her article we did not get a real clear understanding of her manner of pinning down the veil, but after having had it on, we can say that it is simply perfect, leaving nothing further to be desired in the line of comfort and prevention of bees getting under the veil.

Perhaps we can add a little to Miss Wilson's description of her bee-veil, that may help some of our readers.

Around the wide brim of a straw hat sew a piece of black bobinet, having it extend below the hat about two feet. Then hem in around the bottom of the bobinet about two feet of rubber cord. Slip this lower end of the veil over the head, bringing the rubber cord around the neck, and place the hat on the head. Then with a safety pin through the hem at the left of the front, draw it directly down to or near the waist, and pin it. This stretches the rubber cord rather tightly across the breast, so that no bees can possibly get under it while you are working with them; and if you wish to get to your face for any purpose, just raise the rubber cord with one hand, and with the other you can remove your spectacles, if necessary, or, if desired, you can lick off any honey that may be on your fingers. We tried this latter, and it is a simple and easy thing to do—and the new honey was good.

After the veils were properly adjusted, as described, the Doctor lighted a "New Crane" bee-smoker, which has a powerful blast, and works splendidly. Dr. Miller burns fine planer-shavings, which make a good volume of smoke, and the fire does not easily go out.

A number of hives were opened, in all of which the bees were storing nectar rapidly, as was shown by its dropping out when a comb was lifted from the hive and slightly tipped sidewise.

We saw a pure Punic queen—oh, the "Black Beauty!"—and one of Bro. Doolittle's finest queens that was in the New York exhibit at the World's Fair last year. This queen, Bro. D. says, is worth $50 as a breeder. She's a regular "Queen Victory," as our colored brother would say.

Dr. Miller prefers the leather-colored Italian bees, hence nearly all of his colonies are of that variety.

We might speak of some experiments that the Doctor is conducting, but likely when the proper time comes, he will describe them himself, and so we'll refrain from giving anything in that direction. But perhaps it would be well to hint right here, that before sending any new hives or other fixtures to the Doctor for trial, just write and ask him whether he cares to experiment with them. You know his is not a regular apicultural experiment station, and we imagine that ofttimes he's too busy to try many new things.

On Sunday we all attended three services, hearing a clear-cut Presbyterian sermon in the forenoon by the Rev. Davies, followed by the Sunday-school; and then at 3 p.m., a helpful Bible reading in the Methodist church by the noted Dr. John Williamson. We endeavored to "Remember the Sabbath day to keep it holy," as will be seen.

Dr. Miller has lived in Marengo for over 30 years, and so nearly everybody in the city of nearly 2,000 people knows him, and loves him, too. Verily, he is as popular at home as abroad, and apparently all who know him best count themselves fortunate to be numbered among his friends. We do.

One of Dr. Miller's greatest hobbies is roses. Yes, *roses!* and such beautiful va-

rieties as he has, and in such great profusion! As his comfortable home is situated on a hill, commanding an extended and delightful view, we felt that it might very appropriately be called "Rose Hill." "A rose by any other name would be as sweet," we presume, but Dr. Miller's roses are simply sweetness and beauty doubly concentrated.

Mrs. Miller is one of the very kindest and most motherly of women we ever met. She takes such excellent care of the Doctor, and at all times sets him such a splendid example of right and cheerful living, that we don't see how he could well be otherwise than the thoroughly good man that he is. Well may he say, as he did some time ago in *Gleanings*—"Glad I had a wife!"

Now just a word about Miss Wilson, though she is entitled to many words of honest praise. Well, besides her many accomplishments, apiarian and otherwise, Miss Wilson makes the *best* ice-cream we ever had the pleasure of sampling. After absorbing nearly a half dozen large dishes of it in the time we were there, we feel that we are competent to testify to its superior merits, and to her ability in that line, as well as in others. (This testimonial is quite "unsolicited.")

We cannot close without saying at least a little about Dr. Miller's home life. (He needn't read this part of our report.) Most of you have only seen him at conventions, or away from home, and at such places we suppose people are expected to be "on their good behavior." Well, we want to say that Dr. Miller's "good behavior" has become a sort of second nature to him," and so his "behavior" is "good" *all the time*, whether at home, where Mrs. Miller and Miss Wilson could look after him, if necessary, or when away from their benign influence. A person's home life will always reveal his or her true nature. So after meeting Dr. Miller and his family, both at home and away from home, we want to assure those who do not know them, that they are all "pure gold;" never pretending to any greatness or superiority, yet in their simplicity of life and nobility of character revealing daily that which is a blessing to all whom they meet, and that shall endure throughout the years.

That Heaven's best blessings may always attend Dr. Miller and his family; and that long life and continued happiness may be theirs, is the sincere wish of the writer, who is glad that he was permitted to enjoy their kind hospitality, and hopes ever to merit their highest esteem.

That "Real Estate Matter."—Bro. J. E. Pond, of North Attleboro, Mass., wrote us as follows on June 22nd, about "Business," who two weeks ago had a mild criticism in the BEE JOURNAL:

I was amused at the letter from "Business," on page 776, who finds fault with "real estate talk." If he can't find enough good, sound meat in the AMERICAN BEE JOURNAL, even if he don't read about "real estate," he can let it alone. Does he suppose the BEE JOURNAL is published for, or in the interest of one man only? If I were going to find fault I should "go for" "Class Representative" (page 783), and others, but perhaps those articles will be of interest to many others, if not to myself, so I let the editors run their papers to suit themselves, believing they can judge better of what their readers want than I can, and I can, or at least have, always found value received in every issue as yet.

J. E. POND.

Bro. Pond, we don't think "Business" meant to hit very hard, so we haven't taken any offense at what he said. There are all kinds of people in this world, and of course no editor can suit them all, however hard he may try so to do; still, we do *endeavor* to please the great majority of our readers, and *sometimes* we feel that we come pretty close to making a success of it. At any rate, we want always to do the *right* thing, as nearly as we can see it, and that, then, is the best we can do.

☞ It has often been stated that it pays best to run an apiary for extracted honey, but my own opinion is that to obtain the most desirable crop, the apiarist should work for both that and comb honey.—*Simmins.*

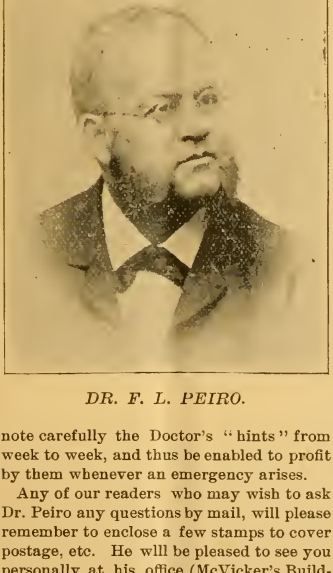
Good Honey-Sellers will likely be needed soon, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

Read our great offers on page 3.

Our Doctor's Hints, on another page of this number of the BEE JOURNAL, is a new department to be conducted by our good and able friend, Dr. F. L. Peiro, of Chicago. It affords us pleasure to introduce the Doctor to our readers by his portrait herewith.

Dr. Peiro has had an experience as a medical practitioner covering a period of about 30 years, so whatever he may advise in his department can be relied upon implicitly.

We hope that at least the mothers in the families receiving the BEE JOURNAL will



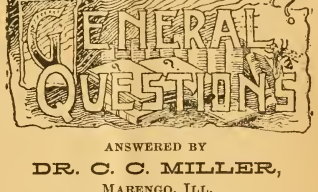
DR. F. L. PEIRO.

note carefully the Doctor's "hints" from week to week, and thus be enabled to profit by them whenever an emergency arises.

Any of our readers who may wish to ask Dr. Peiro any questions by mail, will please remember to enclose a few stamps to cover postage, etc. He will be pleased to see you personally at his office (McVicker's Building, 82 East Madison St.) when you are in the city. His specialty now is throat and lung diseases.

We trust that "Our Doctor's Hints" may prove a helpful and valuable addition to the contents of the "Old Reliable."

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Distance Below Frames.

What is the space that should be between the bottom of the hive and the bottom of the frames? I have one kind of hive—a patent hive—in which the space is ¾ of an inch, and the bees build the bottom full of ladders to climb up to the frames. I. S.

Long, W. Va.

ANSWER.—Three-eighths inch is a good space. That's one of the things about which I made a fool of myself some years ago. I said ¾ was too small a space, for with ⅝ space the bottom-bars of my frames barely cleared the hummocks that were built all over the bottom-board, and if the frames were a quarter of an inch lower, they would be glued fast to the hummocks. A. I. Root replied, "Why, you fool you"—well, no, he didn't say that, but I suppose he thought it—"don't you know that your deep space is the very thing that obliges the bees to build hummocks for ladders?" Now you were just that much smarter than I, for you recognized, without being told, that the bees were building ladders.

Honey-Locust.

What does honey-locust look like?

Lynn Centre, Ill. A. R. J.

ANSWER.—The honey-locust is an open-branching tree with very fine leaves, and one of the thorniest trees that grows. Sometimes the thorns are 4 to 6 inches long, having secondary thorns grow out at the sides. The flowers are small, but the bean-pods large—12 to 18 inches in length.

An Experience With Swarms.

I had a swarm of bees come out, fly around awhile, and go back. In about five minutes they did the same thing again, then remained all quiet for about a week. They then came out and clustered, and were hived in the usual way. Forty-eight hours later the old colony cast another swarm, and they were hived in regular order. What was the cause of this unusual proceeding?

W. S. G. M.

Morenci, Mich., June 16.

ANSWER.—The first was a prime swarm, and it went back to the hive because for some reason the old queen was not able to accompany it. The rest was all according to the usual course of affairs—a second and third swarm coming off after the young queens emerged from their cells.

Cross Swarms, Mating Queens, Etc.

1. I send some blossoms and plants. What sort of plants are they? Are they good for bees?

2. I had a swarm of bees the other day, and they settled on the body of a sappling, and when I went to hive them they went to shooting their little darts at me, and hit me every shot, till I was "crazy." But I hived them. This was the first time I have been stung by bees, when at work with them, in two years, only when I would press them too tight. What made them so cross? I have hived from the same queen twice before. What shall I do with the next cross swarm—smoke them?

3. Will bees kill off drones when they are just gathering enough pollen and honey to keep up brood-rearing?

4. Will a drouth cause the timber—such as sour-wood—to yield no nectar for bees? I mean a drouth that would injure field crops?

5. How will the method of mating queens at will, spoken of by Mr. Russell on page 470, be made known? or will it ever be? M. W. G.

Bankston, Ala.

ANSWERS.—1. It isn't always easy to be sure after being through the mail, but I think the one is Alsike clover, an excellent honey-plant. The other is also good—hoarhound.

2. Generally bees are very good-natured at time of swarming, but occasionally they show bad temper, and I don't know any explanation for it. It is barely possible that something about your clothing or person was displeasing to them. Yes, smoke or sprinkling with sweetened water would help matters.

3. Sometimes they will, and sometimes not.

4. I would suppose it would take a severer drouth for trees which have their roots deep.

5. I don't know. Possibly Mr. Russell may tell something about it. He speaks as if it would be forthcoming whenever a sufficiently liberal reward is offered. There is no doubt that a man giving such a secret to the bee-keeping public would be well rewarded, but I doubt if any of the veterans who read it put any faith in the matter. They have been so many times disappointed heretofore.

Sweet Clover Questions.

I have become very much interested in sweet clover as a honey-producing plant, and wish to ask some questions.

1. Will white sweet clover grow and bloom the first season after it is sown?

2. Is fall or spring the proper time to sow it?

3. Will it grow on sod or waste places without any preparation of soil?

Glen Rock, Nebr. C. L. C.

ANSWERS.—1. No, it is a biennial; comes from the seed one year, makes a rather small growth, next year grows 5 to 8 feet high, then dies root and branch. There is no bloom the first year, only the second.

2. Either will do, but it seems to do perhaps best self-sown in the fall.

3. Yes and no. I sowed a number of acres on pasture land, and I don't know that a single seed grew. Again I have seen it growing in close sod, and on the barest tough clay. I suppose if I had sown in the fall instead of spring, and then had the seed well trodden in by stock, the case might have been quite different. Sown on waste places, it might do well and it might not. Scattered on the hardest roadside, it is pretty sure to make a good catch; but if it were not trodden in, I doubt about it.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Overfeeding the Baby.

O, yes, it is the common mistake of all young, inexperienced mothers, to try to stop baby's crying and fretting by nursing it every time it whimpers! Nine chances in ten, that is exactly what ails the baby—*it has nursed too much!* Its stomach is full of curdled milk which it cannot easily digest, and of course this gives it *colic*, and what other way has the little one of telling you of its trouble but by *crying?*

Just see what wonderful effect *water* has, frequently given—say two or three teaspoonfuls at a time, every half or one hour, according to circumstances. In summer they require drink oftener—just as any of us. Always carry a bottle of fresh water with you when going away from home, for the baby. And as surely and faithfully leave your bottle of paragoric, "soothing juice," and other harmful nostrums—or, better still, throw away the trash so as not be tempted to give it!

If the stomach is already overloaded, and the child suffering in consequence, a small powder of nux vomica may be expedient to help nature in digesting the contents of the burdened stomach, but with care in the adoption of the suggestion made, it ought not to be again necessary.

A little currant jelly stirred up in water makes a delightful drink for baby, as for grown folks. Don't be afraid—it will like it, and do the youngster good.

When nursing baby be very careful of your own diet, as on what *you* eat depends the quality of the milk. If you expect to have wholesome nurse after gorging yourself on corn beef and cabbage, pie and strong coffee, you are mistaken! The mother's diet should be nourishing, but the less meat and the more fresh fruits she eats, the better for her and her child. Indiscretion in diet is largely responsible for many Doctor's visits. And I may as well tell you a secret right here, that such mothers usually incur the impatience of the doctor, because he recognizes the folly or ignorance that makes his visits seem necessary. Physicians have to live, and hence expect patronage in their calling, but, though they would scarcely tell you so, they would respect you more if your good judgment made their services less frequently required.

The honest physician dislikes to make unnecessary calls; his self-respect is touched, and he would resent it openly, if he did not jeopardize your patronage by so doing. Early learn to depend on his wise *counsel;* he will leave less medicine, but render you much better service.

Lockjaw from Rusty Nail.

Well! isn't that too bad? Poor little fellow is suffering enough! But there, don't be so alarmed, no special danger, though a rusty nail run into the foot, in that fashion, is not a thing to be desired. "*Lockjaw?*" Nonsense! Most mischief in such accidents occurs through fear and excitement. At such times allow yourself a moment to *think*, and reasonably *act*. Somewhat after this manner:

"Now, Mary Jane, keep cool and think what is best to do for Johnny. Wringing your hands and going into hysterics won't mend matters—he may become dangerously sick or die while you are going through all those howling gymnastics! Now just be your sensible self and *help* him."

Then the first and best thing to do is to *at once* prepare a warm bath—as warm as he can bear it, and put Johnny right into it. That will allay the usual irritation, and the wound can be thoroughly cleaned while he is in the bath. Let him remain quiet for half an hour in the water, the while dressing the *whole* foot with carbolized water (20 drops carbolic acid to a pint of water). Put him in bed, draw the curtain to darken the room to encourage an hour's sleep or more—all the while speaking und appearing cheerful (some mothers have a way of frightening the life out of a child!); and in a few hours the little fellow will be glad enough to come out into the air and sunshine, little the worse for his accident. A few days of continued dressing with the carbolized water, and the only recollection left on his mind will be for hidden nails, in the future.

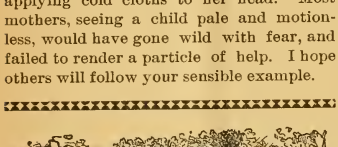
In Case of Accident.

"Why, Susie dear, did you hurt yourself much?" Poor little girl, so pale, and sick at her stomach! But it often happens that falls have results out of proportion to their apparent severity. That swing-rope broke

just in such a way as to land her flat on her back, and so jarring the spinal cord as to produce that pallor and sickness. But, bless you, that is a trifle for a *child*, though it might be quite serious for you or me.

There, you see? She is "throwing up," which is just Nature's vent of relief. Not a bone broken, nor even a particle of skin peeled. The child simply requires quiet rest—no medicine at all. To-morrow she will be ready for another swing, in the tree top.

But there is where you showed your cool courage in laying her flat on her back, and applying cold cloths to her head. Most mothers, seeing a child pale and motionless, would have gone wild with fear, and failed to render a particle of help. I hope others will follow your sensible example.



CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 6.

(Continued from page 814.)

DISEASES OF BEES.

Under this head I will take up everything known to be a disease of the honey-bee, together with moth-worms, etc. First, I will try to teach you what Foul Brood is. I will only give my own experience and views on this point, and try to explain, in as short a manner as possible, everything that has come under my own observation; and to do this properly, it will make a pretty long lesson of itself.

First, I will call your attention to the fact that foul brood is a catching disease. Where it started, no one as yet has given satisfactory proof. Let this be as it may, this disease has existed, and does exist to-day, and may always be at work in some parts of the world, and is to be dreaded by an apiarist. To distinguish foul brood from other kinds of dead brood, I will lead you through a foul-broody colony.

Now, suppose we open up hive after hive till we come to a real case of foul brood, then I will stop and tell you what it is, and when we get through this lesson I am sure you will know foul brood when you see it.

Come, let us walk over to Tom's apiary a few minutes—he says his bees have foul brood. They are constantly carrying out dead brood, and lots of brood dead in his hives; it has been cool and rainy for some time, and wound up with a frost about a week ago, and Tom is really discouraged and almost ready to enter "Blasted Hopes," or anything else that imagination will let him. But here he is at home to-day. Let us go in and examine his bees, and, if possible, lighten his heart.

"Good morning, Tom. We have come over to examine your bees, to see if they really have foul brood."

"All right; I will get my smoker, and will be very glad indeed to have you examine the whole 'shooting match;' and if my bees have foul brood, tell me what to do," says Tom.

"Well, here is a colony that something bad is the matter with. See all the dead bees piled out there!"

"Now," says Tom, "as I open the hive, you all look closely. Take this frame—what does all that dead and rotten young bees mean, smelling so badly, too?"

"That's no foul brood, Tom, and happens in almost all apiaries. You see, during that warm spell a few weeks ago, that caused soft maple to bloom right out, the queen just went to work and filled the combs with eggs, and they had too much brood when that cool, rainy weather came; and then you see, that frost and little freeze at the close of the rainy spell caused the bees to cluster in the center of the brood-nest, and their brood chilled, and now it has turned warm, and the bees are pulling out all the brood that is old enough to bear pulling; the small larvæ will have to rot and dry up in the cells, and then the bees will clean the cells all out, and the queen will deposit eggs in them, and soon the colony will be all right again, unless you let them run out of honey, as you see it has reduced their stores to rear those bees that got chilled, and all this is a dead loss to the bee-keeper.

Spreading brood too early in the spring may bring about the same results.

"Well, Tom, I am glad to know that you have no foul brood—it is only a case of chilled brood."

"Well," says Tom, "I am sure my heart is much lighter now, and I will know next time that I have no foul brood when things turn out as they have this time. I thank you all for the information I have received to-day."

Now let us jump two months ahead, and this puts us up into July, and I hear that Dick has foul brood badly in his apiary, and there has been no cool spell this time, and we know that his is not a case of chilled brood. We will investigate and see, as the only way to determine anything is by close inspection. Well, I see Dick is also in his apiary, even if it is hot.

"Good evening, Dick; here is a crowd of 'foul brood inspectors' that have come over to see how much foul brood your bees have. When we heard it, we supposed your bees were just about all dead, and here you are extracting and taking off sections."

Oh, no! my bees are not nearly all dead; but my! the dead brood I find in some of my hives, and I am scared to think it is foul brood, as I have read so much about it.

"Well, Dick, we have been having very warm weather, haven't we?"

"Yes, yes; and I tell you I almost burn up here on this south hillside, too."

"We are in a kind of hurry, as nearly all bee-keepers are busy now, but we *must* take time to look up your foul brood business."

"All right," says Dick; "yonder is a hive that half the brood is dead, and the cells are all sunken in, and it smells badly. I am so sick about it, as that is just the way they tell me foul brood acts."

"Now, see that brood; see the cells all sunken down. Yes, give me that comb, and let me examine it. Well, Dick, you have no more foul brood than Tom's bees had; you see his was chilled brood, and yours is scalded brood. Your hives are here in this broiling sun, and they are very heavy with *solid* frames of sealed brood, and such sheets of brood afford a great deal of heat itself; that, together with our very warm weather, has caused some of the brood to die from the heat.

"Now, this may never be the case in the Northern States, or where the sun does not shine so hot, but here in the South we often have cases of scalded brood, but you have no foul brood, Dick, and all will be well as soon as the days are not so hot. See that water on the sealed brood there? That is to keep it cool. But the bees sometimes fail to keep the temperature down with water, and then we have some scalded brood. You are all right, you have no disease at all among your bees, and you can tell after this when you have scalded brood, the same as Tom can tell when he has chilled brood."

"Yes," says Dick, "but somebody says that dead brood causes foul brood—what about it, any way?"

"Oh, that's all right, Dick; any of us are likely to be mistaken in our views, and we may be mistaken it our views in this lesson about foul brood, but I will risk it that you will agree with me before we get through, that foul brood does not start from dead brood.

JENNIE ATCHLEY.

(This lesson concluded next week.)

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

July 19.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec, Steel Creek, N. C.

Aug. 1.—Central California, at Hanford, Calif.
J. F. Flory, Sec., Lemoore, Calif.

Aug. 16.—East Tennessee, at Whitesburg, Tenn
H. F. Coleman, Sec., Sneedville, Tenn.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ **In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
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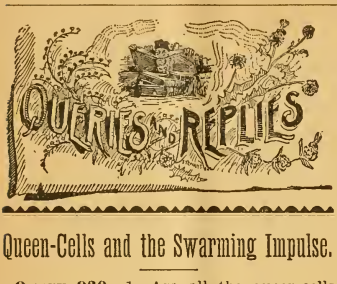


Queen-Cells and the Swarming Impulse.

Query 930.—1. Are all the queen-cells started under the swarming impulse equally good?

2. If not, which are not?

3. Is such an occurence exceptional, or often liable to happen?—Colorado.

1. I suppose not. 2 and 3. I don't know.—EUGENE SECOR.

1. No. 2. The very small ones. 3. It often happens.—M. MAHIN,

1. No. 2. The smaller ones. 3. It often happens.—J. H. LARRABEE.

1. No. 2. As a rule, the small, smooth ones. 3. It often happens.—J. A. GREEN.

1. No. 2. Those that are not. 3. It happens every time.—EMERSON T. ABBOTT.

No. 2. Those of inferior size. 2. It happens only occasionally. — JAS. A. STONE.

1. No. 2. The very small and misshaped ones. 2. It often happens.—H. D. CUTTING.

1. I do not think so. 2. The very small ones. 3. It is often liable.—MRS. L. HARRISON.

1. No. 2. The poorer ones (!); but I haven't looked up the cause. 3. It is liable to occur.—P. H. ELWOOD.

1. No. 2. Those that don't come up to the standard of what they should be. 3. It is nothing exceptional.—J. P. H. BROWN.

1. I don't know of any reason why they should not be. 2. No one can tell. 3. What occurrence is referred to?—J. E. POND.

1. No. The cells that are last finished and sealed often contain poor queens. 3. The occurrence is not exceptional, but common.—G. L. TINKER.

1. No, sir; some will be much larger, and produce much finer queens, while some are small and almost worthless. 3. No, I think the above holds good generally.—C. H. DIBBERN.

1. It seems not, as they do not all hatch, and the queens vary in size. 2. I know of no means of detecting all the bad ones. 3. It often happens with me. —J. M. HAMBAUGH.

Once in a thousand, bees will make a mistake and place a drone-larva in a queen-cell. We have seen that once in our experience. The drone died in the cell.—DADANT & SON.

1. I presume they are. I usually destroyed the smallest, and kept the largest, in selecting cells. The early-formed cells would have the presumption in their favor.—A. J. COOK.

1. As a rule, yes. 2 and 3. When a colony is drained too heavy (in swarming) in bees, and cool weather occurs after the swarm has issued, the embryo queens suffer more or less.—G. M. DOOLITTLE.

1. I think not. 2. I don't know. The weather might have something to do with it, or the honey-flow, for all are not of the same age. Position in the hive also. 3. I suppose it may often happen. —C. C. MILLER.

1. Not always. 2. Those which are not properly cared for. The young queens are small, and sometimes dark. 3. It is not exceptional; in nearly every lot of cells there will be some that I would destroy.—MRS. J. N. HEATER.

1. I think not. The best ones are usually the largest. 3. It is often liable to happen so with other stock. Are a litter of pigs all equally good? If not, which is best? We have to guess by the looks; so with queen-cells.—E. FRANCE.

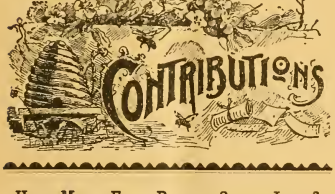
1. No. 2. Those started before the old queen leaves the hive. 3. It often happens in this latitude, that bees start cells over larvæ too old, after the old queen leaves the hive in natural swarming, impulsed highly. — MRS. JENNIE ATCHLEY.

1. Practically so, I believe. An old queen-breeder told me not long ago, that the first queen hatched would prove the best and most vigorous; but I am not sure of this. It may be so in some instances, but I do not accept it as a positive rule.—W. M. BARNUM.

1. No. 2. Ones so small as to cramp the young queen, and such as lack a sufficient quantity of royal jelly. 3. It is a frequent occurrence that those started just before the prime swarm issues are not sufficiently supplied with royal jelly if the old hive be removed to a new stand.—R. L. TAYLOR.

1. No. Some are started over drone-larvæ, and are of course worthless. 2. There will be quite a difference in queens from the same mother, reared at the same time, and apparently under the same conditions. This is beyond our contract, and holds good in other breeding besides that of bees. 3. It is often liable to happen.—S. I. FREEBORN.

1. All the cells started under the swarming impluse do not turn out equally good queens. 2. The poor ones. 3. It "happens" every time, as far as I have had occasion to observe, and that has been often. The queen honey-bee is good or poor according to her *development*, while the worker-bee is produced by a *fixed law*.—G. W. DEMAREE.



How Many Eggs Does a Queen Lay?

Written for the American Bee Journal
BY G. M. DOOLITTLE.

Picking up a newspaper not long ago, I ran across this sentence: "A good, prolific queen—say one that will lay 100,000 eggs in a year—will play out in two years."

In another paper I find these words: "The proper thing for the bee-keeper to do, in order to keep his apiary in good condition, is to renew his queens as often as once in two years. A queen whose egg-producing capacity is limited to 200,000 eggs, will, if furnished the proper amount of breeding-room, deposit more than one-half of those eggs between May 1st and Oct. 1st. I know from actual experience that the best of any queen can be realized in the first 18 months of her life. I do not believe that one queen in 10,000 would be worth keeping the third year."

Now I am at a loss to know the object of thus writing, and fail to see any good reason why some of our best apiarists are recommending the supersedure of all queens the second year. It seems to me that they have been, and are, making a mistake, and one that will work damage to those who are novices in the business. From such assertions as the above the idea seems to be gaining ground that it is an actual necessity to supersede all queens after the honey harvest of the second year. I think this a fallacy, and wish to go on record as saying that *good, prolific queens* do not need superseding in their second year, and that, instead of the queen's capacity being limited to 200,000 eggs, she is capable of laying more than three times that amount during her existence.

To supersede queens at the age of two years is quite a task, even were is necessary; but when we come to consider that most queens are as good the third year as the second, while very many queens are good the fourth year, we see what a waste of time it is to go through all this work, simply for the reason that some have taught us that we should do so. Now let us look into the matter a little.

I use as small a brood-chamber as almost any one in the world, the same having a capacity of about 800 square inches of breeding-comb. This comb is kept filled with brood from the first of June to the middle of August, or 75 days. As there are about 50 cells to the square inch of comb, the queen must lay about 40,000 eggs every 21 days (that being the time it takes to perfect a bee from the time the egg is laid), or 142,860 in 75 days. Now, all good colonies generally have brood as early as February, and by taking the average increase of eggs laid from then to June first, and from the middle of August to the time the queen ceases to lay in the fall, which is about the first of October with us, we have at least 100,000 more, or about 243,000 for the year. If this is the case with the smallest brood-chamber used, it will be seen that still more would be reared in a large brood-chamber of nearly double this capacity, such as is recommended by the Dadants and others.

Along in the '70's I made some large hives on the plan of what was known as the Adair "long idea" hive, making them four feet long. Into one of these I put a colony early in the season, they having a queen in her third year. She was worked to the best of my ability until she had ten Gallup frames literally full of brood. I now thought that she would be content, so that she would not breed in those which I put in for honey. In this I was mistaken, for soon after I

had 32 combs in the hive, she had brood in every one of them.

We did not have the queen-excluding metal at that time, so I had to allow this two-year-old queen to do about as she pleased in the matter of egg-laying, and imagine my surprise to find, as I kept the honey out of her way with the extractor, that she kept brood in those combs for about two months, having at least to the amount of 15 combs solid full of brood. This would give 86,250 eggs every 21 days, as a Gallup frame has 115 square inches, or thereabouts, in it. As this rate was kept up for about 63 days, we have nearly 259,000 as the product of those two months, even after she had laid nearly 500,000 while in the small hives the two seasons previous.

The bees that worked in and out of the entrance of this hive during the basswood yield were a sight to behold, for it seemed like a surging army going and coming all the while. For the benefit of the readers who did not take the AMERICAN BEE JOURNAL at that time, I will say that this colony gave me a yield of 566 pounds of honey that year, while the queen died of old age, or was superseded during the month of September.

My queens average good and prolific in my small brood-chambers for three years, some doing good work in their fifth year; but as a few will fail in their third year, we will call it only three years that they will keep up the rate of egg-laying spoken of above. This would give us about 729,000 as the capacity of a good queen during her lifetime, on an average, instead of 200,000 as given by the writers quoted.

If I am correct, and I believe I am, from many experiments conducted along this line, it will be seen that, if a queen laid only 100,000 eggs a year, she should be good for seven years. Then we see the extreme folly in the recommendation to supersede all queens during the fall of the second year of their life!

Again, we find in a noted work on apiculture the author saying that a good queen will lay 3,000 eggs daily during the breeding season, which is correct where the ordinary brood-chamber is used; but when the same author discourses on the number of bees in a hive, he says there are from 20,000 to 40,000 in every good colony, and places their age at three months. Now, if I figure correctly, three months make 90 days, and 3,000 times 90 would give 270,000 bees in that colony, barring accidents, instead of from 20,000 to 40,000. It is very doubtful whether there is ever as many as 270,000 in any hive, for the good reason that no queen keeps laying to her full capacity for three months, and as a rule bees during the working season do not live more than six weeks, instead of three months.

WHEN TO SUPERSEDE QUEENS.

If I were asked, "When would you supersede your queens?" I should reply, "Never, as a rule;" for I find that with the Italian bees they supersede their queens as soon as they begin to fail to any noticeable amount.

I think it is Bro. B. Taylor who tells us about marking a hive as having a failing queen that was to be superseded by him in the fall, which, in spite of his carelessness, managed to get through to the next season, and very much to his surprise the colony having that queen proved the best one for honey of any colony in the whole apiary. And this is about the way we usually find it when we take the supersedure of queens in our hands instead of leaving it to the bees.

Borodino, N. Y.

Shipping Queens by Mail.

Written for the American Bee Journal

BY EDWARD RYE.

I see the question is discussed in the BEE JOURNAL, as to whether a queen is injured in transit by the mails. Now as I have been fortunate enough to get one alive from Mr. A. I. Root, of Ohio, U. S. A., I deem I am qualified to say a word on the question; and I must coincide with the opinion that they are not injured.

In August of last year my queen came to hand. She was in an oblong cage about 5x3 inches, with four candy holes at the corners; two of these holes were quite empty, and partly filled with dead bees; the other two were half empty, and the entrances were clogged with dead bees. Only four bees were alive besides the queen, just crawling.

The queen was *stuck* "upside down" —her head touching the bottom of the cage—by both wings to the candy when she arrived, and was only just alive. I took her out of the cage, put her in the hollow of my hand, and closed the other hand over her, and held the back of my hands alternately to the fire, when she "came to," and in 15 minutes she be-

gan crawling, and in another five she was quite lively.

I then tried to introduce her, but it was not until she had been endangered by the bees balling her, six or seven times, that I succeeded. This was about the middle of August; by the middle of October I had a fine colony of bees—her progeny—when I removed her to another hive, for the purpose of rearing some queens from her. She soon filled with bees the hive I transferred her to, and they soon filled the hive with honey.

In February, 1894, I removed her again, and now she has her third hive of bees and honey down for the winter. I gave a Mr. Pollock a frame of her eggs, and he also reared some queens from her, which have produced the best bees in his yard, one of the colonies giving him 27 frames of honey, each weighing over 10 pounds, in the tail end of the season. The daughters I have reared from her have also proved equally satisfactory.

Wingham, N.S.W., Australia, Apr. 12.

Combs for Extracting.

Written for the American Bee Journal

BY J. A. GREEN.

Extracting-frames are usually the same in size as brood-frames. In fact, many use them interchangeably and consider it a great advantage to be able to do so. Doubtless there are some advantages in doing this, but my preference is decidedly in favor of having separate sets of combs for the different purposes. Brood-combs are more or less injured by having honey extracted from them, if that honey has to be uncapped—and no honey should ever be extracted that does not require to be uncapped. Brood is not wanted in the extracting combs.

By the use of perforated zinc the queen is readily kept out of the surplus department, to the great convenience of the apiarist, and often to the great improvement of the honey.

My extracting-frames are closed-end, tightly clamped together by means of screws. The cases which contain them are only six inches deep. There are several very decided advantages in having the extracting-frames shallow. The combs are not so easily broken, and they are more easily handled and uncapped. The bees will enter a shallow super more readily, and room may be added more gradually as it is needed.

By the use of perforated zinc and the bee-escape, the combs are freed from bees with far less labor than by the old plan of shaking and brushing the bees from the combs.

After they are taken from the hives, these shallow supers with fixed frames are handled much easier than the deep, loose frames. By loosening the screws, the whole lot of frames may be dumped out on a table on their backs together, where they are easily handled.

Most of my extracting-combs have been transferred into the frames they now occupy, some of them from frames of odd sizes or those in which the combs were crooked, and some from box-hives and scraps of comb.

Now it is decidedly a nuisance to extract from crooked combs, and as transferred combs are almost always more or less crooked, I suppose you wonder that I should advise using transferred combs for extracting. But my extracting-combs are nearly all as straight as a board, and this is how it happens:

In my extracting-supers I use only seven frames in a space of 11¼ inches—a space which is just right for eight brood-combs. The bees must build out the combs a little thicker than they were originally. When the honey is extracted from them the first time, they are pretty crooked, and some patience is required. I cut away every high place, and am very careful to uncap every low place, so that the bees will have a chance to build it up level. This work of straightening the combs, as well as the labor of uncapping them forever after, is made much easier by the fact that the top and bottom bars are made just 1 3/32 inches wide. This forms a guide to the uncapping-knife, which extends clear across the shallow frame, and everything is pared down to a level each time the honey is extracted from them. As the frames are made accurately, and are held at fixed distances, by the time the combs have been uncapped two or three times the crookedest of them are as straight and even as one could wish. As I allow all my honey to be capped over before it is extracted, it is a great saving of labor to have every comb uniform.

The top-bar of my frames is 11/32 and the bottom bar 8/32 of an inch thick. This is sufficient to keep them from sagging when the frame is only 5¾ deep, and full of comb, and is preferable in some respects to a greater thickness. If you expect the entire weight of the honey to be suspended

from the top-bar, it must be made heavier.

Combs that have been transferred properly fill the frame completely, and on this account are better than most of those built in the frames, as it is a difficult matter to get bees to fill frames completely clear to the wood on all sides, even when full sheets of foundation are used.

In transferring combs, always be sure to have them fill the frame completely. Cut all pieces square and fit them closely together. The extra trouble will be well repaid by the greater value of the combs obtained.

To fasten the combs into the frames, I prefer to use ¾-inch wire nails, driving them through the top-bar into the comb as near the septum as possible. They may also be nailed from the bottom, but if the fitting has been carefully done, this will usually not be necessary.

If you have any pieces that cannot be fastened securely with nails, tie them in with ordinary cotton wrapping twine. The bees will remove this themselves if you do not get around to it in time.

Pieces of comb of any size may be used, but it is best to have them reach from the top to the bottom of the frame. It will pay to save all pieces of good comb four inches square or more.

While I want all my brood-combs built on full sheets of foundation in wired frames, I think that for extracting combs it is much more profitable to use good comb in this way than to melt it up and make it into foundation. I also think it will pay even the comb-honey man to have at least a few sets of extracting-combs, so that there is no excuse for melting up good combs.

Ottawa, Ill.

Bee-Keeping in Mississippi.

Written for the American Bee Journal

BY W. T. LEWIS.

This has been a light honey year here on account of the cold snaps and rain just as our best and finest honey-plant, the holly trees, in the bottoms were in full bloom. We had only three or four days of fine weather for the bees after the honey began to come in, till a rainy and cold spell put a stop to everything with them. The crop will not be more than ¼ or ⅛ af an average so far.

The holly tree should be added to the list of honey-trees, for it is the finest with us, the honey being perfect, and clear golden in appearance.

This country does not come up to some others altogether in quality, but it never makes a complete failure in honey as we know of, and sometimes it brings up a good showing on the credit side.

We have no bee-association in north Mississippi, therefore the only way we can get at what our country is doing in this direction is by occasionally seeing a report from some one in a bee-paper. We need a State bee-association—at least one for north Mississippi. The Secretaries of some of the State and County associations will confer a favor upon us by mailing us a copy of their constitution and by-laws, that we may organize an association here in Mississippi, and county or district. We have a good many of the improved hives in our country and part of the State, yet no association. Recently a hive manufactory was started at this place, and is running by steam power, scattering improved hives over the country.

I hope Gusty Schraeder will write often. Her article on transferring is good, and that is the right way, though told in a funny manner. It was about the way I did my transferring this year, and all did finely.

Success to the AMERICAN BEE JOURNAL.

Lewisburg, Miss., June 8.

P. S.—What has become of the Chinese contributor to the BEE JOURNAL?

W. T. L.

[Several have asked the same question about our Chinese writer on bees. He is doubtless devoting his time to the care of his numerous "sugar-flies," and may be getting ready to write a book on the experience of a Chinese bee-keeper in America. It will be a funny one, if he does.

We hope Mr. Wong Lung will send in his report for 1894, later on.—EDITOR.]

Sugar for Winter Stores.

Written for the "Bee-Keepers' Review"

BY HON. R. L. TAYLOR.

With a view to bring out in some measure, if possible, the difference in value between sugar syrup and honey for winter stores, I selected, at the proper time in the fall of 1893, 24 col-

onies, one-half of which were to be fed sugar syrup for winter stores, and the other half to be supplied with honey for the same purpose.

Considerable care was taken to select and arrange the colonies so as to have the two sets as nearly equal as possible in point of strength, but the bees were not weighed separately from the hive, the strength being estimated by the amount of space occupied by the cluster. This is not a satisfactory course to pursue when it can be avoided. I now appreciate the importance of the weighing better than I did at the time the experiment was undertaken, and that course will be taken if the experiment is repeated. At some seasons of the year the manipulation necessary to secure the separate weight of the bees would be so objectionable as to preclude its use, but at the time contemplated it would be neither objectionable nor very difficult.

Owing to the character of the latter part of last season, few of my colonies were very strong last fall, and in the effort to select colonies with such conditions as would facilitate the operations of the experiment, it turned out that those selected were considerably below even the average strength, and in this way another mistake was made which should not be repeated. It is necessary to point out further that the colonies selected were partly in two-story Heddon hives, and partly in one-story ones, and that in order to deprive one set almost completely of honey, and to supply the other set with an abundance of honey for winter stores, it was found necessary to so manipulate the hives that those to be wintered on honey had two-story hives, and those to be fed sugar syrup one-story.

These arrangements were made the last of September, and the necessary feeding was done at once.

The hives were first weighed when they were put into the cellar, on Nov. 15th, and again when taken out the first days of April. It will be observed that two are wanting from the sugar-fed set, and three from those wintered on honey, but as none of them, as far as appeared, perished on account of diarrhea, or on account of any peculiarity of either kind of stores, nothing can be predicated on that fact for or against either kind of food.

The following figures show the weight of each hive at each season, and the difference or amount consumed by each in pounds and ounces:

THE SET WITH SUGAR STORES.

Fall Weight.	Spring Weight.	Am't Cons'd.
33-12	29-4	4-8
31	28-8	2-8
30	26	4
33-4	30-8	2-12
29	26-4	2-12
29-8	26-8	3
32-4	29	3-4
32-4	29-8	3-12
26-12	23-4	3-8
26-8	24-4	2-4
		31-4

THE SET WITH HONEY STORES.

54-4	48-8	5-12
57-8	51-12	5-12
56-4	45-8	10-12
63-8	54-12	8-12
45-4	39-8	5-12
47-8	40	7-8
48-4	43-12	4-8
46-8	41-4	5-4
80-12	63	7-12
		61-12

The amount of stores here shown to have been consumed during the winter is, I think, remarkably small, at least it is smaller than anything I have hitherto become acquainted with, and this proportion seemed to hold throughout my apiary. Indeed, in most cases examined, the stores seemed scarcely touched, and though I lost a considerable percentage, not a colony perished of starvation.

But the important point brought out by this experiment is the economy of feeding sugar syrup for winter stores instead of honey, where feeding is necessary. From an examination of the figures, we find that the average consumption of sugar stores was but 3¼ pounds, while that of honey was 6⅛ pounds nearly, or more than twice as much. This has added importance when we remember what has been well established, that granulated sugar syrup is fully equal to the best honey as winter food for bees, and far safer for that purpose than any inferior honey.

EXPERIMENT IN OUT-OF-DOOR WINTERING.

With a hope of learning something bearing on the subject of out-of-door wintering, I made the following experiment:

In November, at the time when I was putting the bees into the cellar for the winter, I selected six colonies of good average strength, each in a single-story Heddon hive; then the hives were placed

one above the other with nothing between them except a single sheet of wire cloth so prepared that each colony was provided with its proper entrance. Of course the lower hive retained its bottom-board, and the upper one its cover, but the rest of the covers and bottom-boards were entirely removed.

The lower hive was raised about ten inches from the ground, then the whole was well packed below, and with about four inches of dry planer-shavings on top and on all sides except about four inches in width of the front left for the entrances. The cover was left sufficiently loose to allow the escape of moisture into the packing, and the entrances were closed to within about an inch in width.

During the winter these bees had comparatively frequent flights, and seemed to be doing well. About March 20th some of the upper ones brought in considerable pollen, but the two lower ones exhibited but little signs of life. Then came the blizzard in the last of March and first of April, and when that had passed, and other colonies began to bring in pollen, these remained ominously silent—indeed, the silence seemed chronic, and an examination revealed that it really was so—they had all passed away.

The combs were dry and clean, and the stores abundant, but there were no live bees, and very few dead ones. There was very little, if any, appearance that any had finally perished in a cluster. Unless the arrangement of the hives and the thoroughness of the packing had deluded the bees into thinking that it was so warm that they might with safety try the open air, and thus ultimately perished, I know not how to account for their utter destruction.

Though the stores of five of the six colonies was largely sugar syrup, the six colonies consumed an average of five pounds and 13 ounces over and above the weight of the bees which had perished outside.

Lapeer, Mich.

Hiving Swarms and Finding Queens.

Written for the American Bee Journal

BY CHESTER BELDING.

Have you tall trees near your apiary where your swarms alight? and you are troubled to get them down? If so, get a stiff, light pole, the straighter the better; smooth off all knots, and have it long enough to reach, or nearly so, any tree you wish to pick a swarm off. Attach at the upper end a small pulley of sufficient size to run a small cord or clothes-line. Have a hiving box of light, thin wood, 8x10 inches inside, and about 18 inches high, with plenty of holes bored on all sides, and a couple of cross-bars inside, made of top-bars of old frames, with some comb left on.

Now procure a small cord (clothes-line will do); it should be twice the length of the pole, and your hiving box should have a wire bail, or cord handle, attached near its top, also a stiff wire loop on one side of sufficient size to slip up and down easily on the pole, and of sufficient length so as not to cause the box to rub against it. Now you are ready; let them file out, and up, if they choose.

As soon as a quart or so have settled, run a cord through the pulley, stand the pole up against the branch, with the top of the pole above the cluster; attach a cord, one end to the honey-box bail, and the other end to the bottom of the box; slip the pole through the wire loop, and run it up just under the bees, and by pulling the cord gently, dislodge a few on the box, or shake the limb with the pole. As soon as a few have entered, drop the box a little, and jar the branch. Have an extra-light pole for this work, and if bees cluster on a large limb, raise the box on top of them, and with your light pole raise up the smoker, well fired up; give them smoke on the under side, and they will soon enter the box; and by using the cord and pulley, they can be let down at your feet with ease. If lower limbs are in the way, you can let the box down through them very much easier than you can handle them when the hiving-box is permanently attached to the end of a long pole.

Now to hive them, carry the box to the hive where you wish them to stand. Have two wedges, about three inches wide at one end, and coming to a point at the other, and a little longer than the hive if from front to rear. Raise the hive in front, and slip these wedges under, shoving them clear to the back of the hive, so that no bee can enter save at the front. Drop down a thin board about 18 inches wide, and two or three feet long, in front of the hive, one end on the stand near the front of the hive. Shake the bees from the box in front of the hive—not too many at first—until they set up the call, and in they go.

This is the simplest and quickest way we ever tried, and it saves all stirring or

brushing around the entrance, as the bees march right under the front, on the double-quick; when you pull out the wedges, and drop the hive nearly down.

HOW TO FIND THE QUEEN.

Now to find a queen—that is a bother. One that leaves the combs every time, as some of the blacks and hybrids will, we "strain" them, and this is the way we do it:

Set the old hive (that has the queen you want to find) off the stand; place a bottom-board on the stand, with a box just the size of the hive, and about 4 inches deep, on the bottom-board. Give plenty of entrance to this box, the same as to the hive. On this box place a queen-excluder, and on the excluder put an empty hive; stop up all the entrance to the empty hive above the excluder. Now shake all the bees from the combs down in front of the box with the empty hive on it, and put the combs, after the bees are off, into the empty hive. They will enter the hive through the queen-excluder to the brood-combs, and when all, or nearly all, are up, you can lift off the hive with the bees, and you will easily find the queen in the box below. It is only an occasional one that thus troubles the expert, but it is a sure and comparatively easy method, especially to one not accustomed to hunt out old queens, and it is a sure catcher.

Middletown, N. Y.

Smokers—When to Use, What to Burn.

Written for "The Farmer's Advocate"

BY JOHN MYERS.

A good smoker is one of the essentials in any bee-yard, and a poor one is one of the greatest nuisances that a bee-keeper can have. Just think of a person in the midst of opening a colony, and they begin to get rather angry, and he makes a grab for the smoker and commences to puff, puff, but there is not draft enough to blow the smoke clear of the nozzle of the smoker! Methinks that under such circumstances a person's thoughts are not very elevating.

A good smoker should have a strong draft—strong enough to blow the smoke clear across the hive and down between the frames to the bottom of the hive, if needed. Now, don't think that I advocate overdosing them with smoke, because I don't, as you will see further on, but there are times when one needs a good volume of smoke, and it is sometimes necessary to blow it down between the frames, especially when you want to drive the bees out of an upper story.

Another essential in a good smoker is that it has a good, lively spring, so that it will contract and enlarge quickly. I like a coiled spring best; there is no other kind of spring that will act so quickly and at the same time take so little pressure to close it.

The leather on a smoker should not be too heavy. I have often seen persons, when buying a smoker, pick one with the heaviest leather they could find, thinking that it would last longer than one with lighter leather, but in that they were mistaken; as long as the leather is not soft and spongy, we need not care how light it is; the working of the bellows causes the leather to crease, and the heavy leather will crack much sooner than the light.

In purchasing a smoker, I do not buy one that is too small; the extra trouble of filling so often will soon make up the difference in price between a large and a small one.

HOW TO USE THE SMOKER.

When and how shall we use them? I always use the smoker every time I open a hive; I think it pays; you don't make your bees so cross if you use a little smoke when opening the hive. I once heard a bee-keeper say he never used smoke when he opened his hive; I went to visit him, and see the bees that never needed smoke. They were the crossest insects I have ever seen. When the owner went to open a colony, he protected his head with a veil, and his hands with gloves, and tied the bottom of his pants close, so no bee could get in there; then he took off the cover of the hive and started to manipulate the frames. The bees fairly poured out at him, and tried to sting him all over, but, of course, he was thoroughly protected, and they could not do him any harm; but woe to the cat, dog, man, or beast that came within ten rods of him. I went home satisfied that I did not want any of the bees that needed no smoke.

I have worked among my bees for half a day without a veil, but I always use a smoker. I don't advise working among bees without a veil over the face; I nearly always wear one.

I never believe in overdosing bees with smoke. I go to a hive that I want to look into and take off the cover, then start to raise the quilt at one corner; as I continue to take it off, I gently puff in a little smoke just to let them know that I am around; as a rule, scarcely a

bee will take wing; they will sit quietly on their combs until I am through looking at them. If I happen to let a comb slip or jar against the hive, I will be apt to need the smoker again. In the above I am supposing that they are Italians (the only kind I keep); if the bees are blacks, they will be more irritable.

I might tell how to use the smoker in driving bees out of section-cases and upper stories, but, since the introduction of the Porter bee-escape, this method is very little practiced. The escape does the business so quickly, and with so little trouble, that I think very few bee-keepers will go back to using smoke for clearing the supers.

FUEL TO BE USED IN THE SMOKER.

I always use dry planer-shavings—not those from a large planer used in dressing lumber—those are too coarse—but those from a buzz planer or moulding machine are just right; put a few in the bottom of the smoker, then light a match and throw it in on them; and after the shavings gets a-going, commence working the bellows and get the shavings to become thoroughly heated through; now fill up the smoker with more shavings, and pack them as you fill; keep puffing the bellows while you are filling, and when you have it filled, place a few bench shavings—those made with an ordinary hand-plane—on top, to keep the small shavings from being blown through the nozzle; you are now ready to go to work.

There are other things that make good smoker fuel—such as rags, rotten wood, carpet felt, cedar bark, etc., but, after trying all of them, I like the shavings best. If you were to ask Mr. Wm. McEvoy, Foul Brood Inspector, what were the three best articles for smoker fuel, he would be likely to say: First, cedar-bark; second, cedar-bark, and third, cedar-bark, as there is nothing, in his opinion, like dry cedar-bark for smoker fuel. Well, cedar-bark, if well dried, is very good, but *I* like pine planer shavings a little better.

The late Mr. Corneil, at one of our association meetings, told me the best article he had ever tried for smoker fuel was carpet-felt—that is, the felt paper used for putting under carpets. The way he used it was to roll up a piece large enough to fill the smoker, then light the lower end and shove it into the smoker. He said it would last a long time, and would not go out until it was all consumed. I have not tried it, but mean to do so this season.

Stratford, Ont.

Dividing Colonies at Swarming-Time.

Read at the Southeastern Kansas Convention

BY J. C. BALCH.

As the swarming season approaches, there are a good many bee-keepers in a small way that have a few colonies of bees. They say, "I can't stay at home to watch the bees, and if they swarm when I am away, they will go off. If I could only make them swarm when I am ready to take care of them, it would be such a relief to my mind."

To all such I would say, it can be done; all that is necessary is to have your bees in movable-frame hives. I don't mean hives with some kind of frames in them, and the combs built crosswise of them, but frames with the combs built straight in every one, so that you can take out each and any frame that you please, at any time that you may wish. Then if you are going to be away from home, or have to be out on the farm away from the bees, you can look through the hive for queen-cells, once each week, and if there are none, you need have no fear of their swarming for a week. But when you find queen-cells on several combs, with *larvæ* in them, you may be sure they will swarm in a few days, if left alone; and now is the time to divide them.

Get the new hive with foundation or starters in each frame, and bring it to the colony to be divided. Then take out the combs and search carefully until you find the queen. Place the comb she is on in the new hive, near the center with one other comb containing some honey, and a frame with foundation between them; then put the two frames taken from the new hive into the old one on the outside of the combs next to the wall of the hive, and move the old colony to some other location, a rod or more away, and put the new hive with the queen and two frames of combs where the old one stood.

Do this any time in the forenoon of a warm day, and the bees will divide themselves. Before night all the bees that would have gone with the swarm will have gone back to the old queen.

Then in six or seven days you can open the old hive and cut out all the queen-cells but two of the largest, one of which will hatch in a few days, and she will destroy the other. When the young queen begins to lay, move those two outside empty frames to near the center of the hive, and they will be filled with nice worker-combs. If you put

them in the center at the start, they would have built drone-comb in them, because a queenless colony, or a colony with a virgin queen, always builds drone-comb, if they build any. But after the queen is mated, and laying, they don't care for drones until they want to swarm again, but, on the contrary, they are interested in building up the colony with a working force to gather stores for the coming winter.

Bronson, Kans.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Best Year for Honey.

This is the best year for honey we ever had. Bees are doing finely.

HENRY ALLEY.

Wenham, Mass., June 20.

Honey Coming in Rapidly.

Honey is coming in at last rapidly. I have about 250 colonies in prime condition for it. J. W. TEFFT.

Camillus, N. Y., June 20.

Bees Doing Well Now.

Bees are doing well now in our vicinity. Till about June 5th we had very discouraging bee-weather, as it was so cold and rainy. IRA SHOOKEY.

Long, W. Va., June 19.

Not Much Over a Living.

I have 18 colonies of bees, and owing to dry weather and white clover failing, they have not gathered much over a living. The colonies are strong in bees.

A. F. HANNA.

Epworth, Iowa, June 27.

Feared a Failure of Crop.

Since early in April we have had no rain until the last few days. We were beginning to fear a failure of all crops, as everything was drying up. MRS. A. L. HALLENBECK.

Millard, Nebr., June 21.

Having a Honey-Famine.

I write to ask about the honey-flow in Illinois. Here we are having a honey-famine; the weather seems just right, clover and sumac at their best, but nothing in them. My colonies are extra heavy, having been fed early, and built up good on dandelion and plum blossoms, but now that clover has come they are starving. A few swarms issued, but had to be fed to keep from starving.

Basswood will open in one week, and if the same conditions continue, the bees must die. The hives do not contain, on an average, one pound of honey. I have never seen these conditions before, in an experience of 20 years. The past four years have been unprofitable with bees, but I think what few are left are going to play out now. E. A. MORGAN.

Chippewa Falls, Wis., June 20.

Getting a Fine Flow of Honey.

Chestnut and sourwood are now in full bloom; and bees are getting a fine flow of honey. Many bees were killed by the late cold. J. G. TETER.

Athens, Tenn., June 19.

Working in the Sections.

My bees are now working in the sections, but I failed to learn the source, as white clover is about over. I have had one swarm from 50 colonies. No honey yet in this vicinity. J. C. WALLENMEYER.

Evansville, Ind., June 25.

Having a Splendid Honey-Flow.

I am enjoying a splendid flow of honey. Raspberries gave a splendid flow of honey, and still continues to yield. If white clover yields honey this year as it should, I can see no reason why I should not get a large crop of honey. My first swarm issued on June 3rd. This is the earliest my bees ever swarmed. G. F. TUBBS.

Turtle Point, Pa., June 21.

A Swarming Experience.

My bees are doing well. I have 12 colonies. Yesterday I noticed a swarm on one of the trees. I went for a hive, and when I got back with it they were gone. Soon after, one of my neighbors notified me that a swarm of my bees had taken possession of one of his apple trees, and wished me to come and take them away. I took a peck basket and a turkey's wing, and went up and brushed them into the basket, put the cover on, and brought them home, a quarter of a mile from my house. I dumped them down in front of a Langstroth hive, and they marched in all right.

I sold two colonies, this spring, for $10 each to a gardener, to put in his cucumber green-houses, to work on the flowers.

GEO. RACKLEFF.

Woodfords, Maine, June 21.

Southeastern Kansas Convention.

The Southeastern Kansas Bee-Keepers' Association met at my apiaries on June 15th and 16th. We had a good meeting, though it rained all the forenoon of the 16th, and there were several who had intended to be present that had to be in the harvest field, as their wheat was falling badly, on account of dry weather, chintz bugs. But we are having a glorious rain to-day, as I am writing.

Bees have not been storing much honey for the last ten days, as it was too dry, but we are getting a rain now that will hunt the roots of the corn and potatoes. The balled mint is just beginning to bloom, and it will now last much longer, and produce more nectar.

We will hold our next meeting at the apiaries of J. C. Wilson, two miles north of Bronson, on Sept. 15, 1894.

J. C. BALCH, *Sec.*

Bronson, Kans., June 18.

Basswood Yielding Freely.

Basswood is now yielding honey freely.

Ottawa, Ill., June 26. J. A. GREEN.

Honey Prospects in California.

With only a few exceptions the response to the question on honey prospects, at the Central California bee-convention on June 6th, was "fine," when it's not too cold and windy. We are having an unusual amount of cool and windy weather, yet the flowers seem to secrete honey plentifully, and are doing better, all things considered, than any year since 1883, which was the best honey season on record. J. F. FLORY.

Lemoore, Calif., June 18.

Drouth and Wind-Storm.

The honey crop was a failure here last year from drouth, and will be this year from the same cause. We had a severe wind-storm yesterday, that tore up a 60-foot implement and hay building for me. I have 130 colonies of bees, which are starving now—drouth is the cause of it. All the white clover is dead. The hay crop is a complete failure, and the small grain will be very light here. The corn crop is all right yet, if we get rain from this on.

J. K. ESKEW.

Shenandoah, Iowa, June 21.

Pasturage for Bees.

Much is being said and written concerning bee-pasturage, which, to us all, is very interesting, but much more can be done by united effort. For instance, if each one would be a "committee of the whole," and note the time of flowering of the different trees, shrubs and other plants—in fact, anything that bees procure honey or pollen from—then in the fall we could have a "general round up," and discuss the best methods to propagate the plants that are of value. I think there are amongst us persons that will give valuable suggestions, and note the flora of the parts they live in, and report at such time as the AMERICAN BEE JOURNAL is willing to give us the information through its columns.

Florence, Nebr. W. H. MORSE.

[Mr. Morse suggests an interesting matter here. We will try to publish the reports as fast as sent in.—EDITOR.]

Considerable Extracted Honey.

We will get no comb honey here to speak of this season, but will be able to get considerable extracted honey. The clover is a failure here. DR. G. L. TINKER.

New Philadelphia, Ohio, June 26.

Basswood Budded Full.

Bees are gathering honey slowly from clover. Basswood is budded full, and I think it will be open in about a week; if the weather is favorable, we will get some honey. C. A. HUFF.

Clayton, Mich., June 25.

Swarms and Their Alighting.

I noted Mr. Doolittle's report of the hard time the wet weather made for his bees. The fruit-blooming season was especially fine here (southeastern part of Monroe county), and the bees had their combs loaded with honey. The wet spell came just as the late fruits were going out of bloom, so they could not have lost much. Of eight colonies, four have cast heavy swarms, and three more act as though they might come out any time. My husband says the bees don't appear to pay any attention to the white clover, of which we have considerable. Has any one noticed that bees shun black walnut trees as alighting places? and are they likely to drift south to alight? Our very limited experience answers "yes" to both questions.

MRS. W. W. SHEPARD.

Honeoye Falls, N. Y., June 15.

Probably Bee-Paralysis.

Here's a question I desire to submit to the wise ones throughout the kingdom, for a solution. It is the second case that has occurred in my experience in bee-keeping, within the past ten years.

About the 10th of May, after a decided increase in population of the hives was noticeable, at the entrance of one hive, day by day the bees were observed to be clustered about the entrance, as is the case where robbers are trying to enter, and the same appearance was indicated by numbers of bees seen dragging out and killing numerous small-sized bees.

Upon close examination the victims are seen to be black, shining specimens, evidently undersized, and apparently unde-

veloped in some way, for many of them seem to fly with difficulty. They are not all of a color, many of them of a grayish hue, but little varying (in color) from the common workers of a mixed race.

These little black bees are, as a rule, lively, and offer no resistance to the expulsion from the hive. Since first noticed, their numbers have very much increased. They do not seem to work, nor fly away from the hives as the workers do.

The same state of things was observed in a colony seven years ago, and at the time I sent a few of those small, black bees to Mr. Root, but, as I remember, he gave no satisfactory explanation of the phenomenon. Have any of the readers of the AMERICAN BEE JOURNAL had similar experience? L. F. ABBOTT.

Lewiston, Maine.

[In the heading to the above, we have suggested bee-paralysis, as the symptoms as described by Mr. Abbott seem to tally somewhat with that disease, as stated in the BEE JOURNAL heretofore. If paralysis is not the trouble, will those who can give a better guess, please speak out?—EDITOR.]

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

Bound in paper cover, postpaid, 65 cents; or given free as a premium for sending us two new subscribers; or clubbed with the BEE JOURNAL a year—both for only $1.40. Send all orders to the BEE JOURNAL office.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of last number of the BEE JOURNAL for description and prices.

Have You Read the wonderful Premium offers on page 3?

Honey & Beeswax Market Quotations.

ALBANY, N. Y., Mar. 23.—The honey market is very slow now. The demand is about over on comb. Some extracted wanted at 6c.; if dark color, 5c.
Beeswax, 26@27c. H. R. W.

BUFFALO, N. Y., May 14.—Trade is very slow, and we have still a liberal stock on hand. We quote: Fancy comb, 13@14c.; choice, 11@12c.; dark and common grades, 8@9c. Beeswax, 25@30c. B. & Co.

CHICAGO, ILL., May 10.—The market for comb honey is not of large volume at this season of the year; a fine article of white comb brings 15c. in pound sections. Extracted slow of sale, at 4@6c. Beeswax, 25c.
R. A. B. & Co.

CHICAGO, ILL., Mar. 24.—The honey market will be very quiet for the balance of the season. We will not do much business until new honey comes in. We cannot quote prices but will obtain the best possible price on what little stock we will sell until early fall. Beeswax is very active at 25@26c. J. A. L.

CINCINNATI, O., June 19.—Demand is slow for all kinds of honey. The range of prices is 4@6c. for extracted, and 12@14c. for best white comb. There is no sale for dark comb honey at any price.
Beeswax is in fair demand at 23@25c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, MO., Apr. 6.—We have had an exceedingly slow trade on honey this season, and prices ruled comparatively low. We quote to-day: No. 1 white comb, 1-lb., 14@15c.; No. 2, 13@14c.; No. 1 amber, 12@13c.; No. 2, 10@11c. Extracted, 5@7c.
Beeswax, 20@22c. C.-M. C. Co.

NEW YORK, N. Y., May 25.—New crop of Southern honey is arriving freely. The market is well supplied and demand very light. We quote: Common grade, 50c. per gal.; choice, 55@60c. Beeswax is firm at 28c
H. B. & S.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Convention Notices.

CALIFORNIA.—An extra session of the Central California Bee-Keepers' Association will be held in Hanford, Kings Co., on August 1, 1894. J. F. FLORY, Sec.
Lemoore, Calif.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers' Association will meet at the Court House in Charlotte, N. C., on July 19, 1894, at 10 a.m. All interested in the culture of the honey-bee are cordially invited.
Steel Creek, N. C. A. L. BEACH, Sec.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

TENNESSEE.—The next annual meeting of the East Tennessee, Bee-Keepers' Association will be held at Whitesburg, Tenn., beginning on Thursday, August 16, 1894. All members and other interested in bee-culture are invited to attend. H. F. COLEMAN, Sec.
Sneedville, Tenn.

Profitable Bee-Keeping, by Mrs. Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

"Foul Brood: Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

Advertisements.

Given Press, with Dipping Plates and Boilers, etc., for sale **Cheap.** Has been used only a little.

THOMAS G. NEWMAN,
147 South Western Avenue, • CHICAGO, ILL.
1A4t *Mention the American Bee Journal.*

Untested Italian Queens

Ready to mail—75c. each. **H. G. ACKLIN,**
1024 Mississippi St., ST. PAUL, MINN.,
☞ **Northwestern Agent for A. I. Root's Bee-Keepers' Supplies.**
WHEN ANSWERING THIS ADVERTISEMENT, MENTION THIS JOURNAL.

—FINE—
Breeding Queens

In August and September, $3.00 Sample of their Bees upon application.

1 Untested Queen..... $ .75
12 " " 8.00

J. F. MICHAEL,
GERMAN, Darke Co., O.
1E6t Please Mention this Journal.

Bees! Bees! Yes, Bees!

135 NUCLEI to be Sold At Once—with 2 Frames Brood and Honey, and Lots of Bees, with 5-Banded Queen, for the **low price of $1.50 each.** No duty on Bees. Special prices on large lots. Also a large lot of **Fine Queens, 5-banded,** all ready to be mailed, at 75c. each.
N. H. SMITH, Box 2,
26Atf TILBURY CENTER, ONTARIO.
Mention the American Bee Journal.

1000 BEES

Per minute go through my **New Escape,** constructed of platinum wire.

Sample by mail for six 2-ct. stamps. After testing, you find the above assertion exaggerated, and are dissatisfied, return Escape and I will promptly return your stamps.

C. W. DAYTON,
1A1t FLORENCE, CALIF.
Mention the American Bee Journal.

As Usual.

"Great Scott! man, what are you doing with four alarm clocks in your room?"

"I want to try and get a little sleep."

"How can that help you?"

"My wife and baby have gone for a visit, and everything is so blamed quiet I can't close my eyes."—*Inter Ocean.*

HONEY QUEENS!

5 & 3 Banded, bred in separate yards 12 miles apart, and only from Queens selected among hundreds, whose bees gather the most honey, cap it the whitest; the gentlest, most beautiful, and the least inclined to swarm. 5-banded bred from a Queen showing only large 5-banded bees. Safe arrival and satisfaction guaranteed. **Warranted Queens, only 60 cts.; Tested, 90 cts.**
J. H. GOOD, lock box 69, Nappanee, Ind.
25A10t *Mention the American Bee Journal.*

THE BEST IS NONE TOO GOOD! You get the **best** of satisfaction if you buy Dov. Hives, Hoff. Frames, Sections, Foundation, etc., here. Distance cuts no figure in Freight rates. Good Shipping Facilities. No matter where you live, send for my 64-p. Catalog, and ask for an estimate on what you want.
16A10t **J. M. Jenkins, Wetumpka, Ala.**

GOLDEN QUEENS FROM TEXAS.

MY BEES are bred for **business, beauty and gentleness.** Safe arrival and satisfaction guaranteed.

"216 well-filled 1-pound sections is what I took from one colony in 1893, containing a Queen bought of you.—J. A. WHITTAKER, Oak Cliff, Tex."

Queens, Warranted, $1.00 each.

J. D. GIVENS,
5A26t Box 3, LISBON, TEX.

Mention the American Bee Journal.

MUTH'S HONEY EXTRACTOR

PERFECTION
Cold-Blast Smokers,

Square Glass Honey Jars, Etc.

For Circulars, apply to CHAS. F. MUTH & SON, Cor. Freeman & Central Aves., Cincinnati, O. Send **10c** for Practical Hints to Bee-Keepers.

TAKE NOTICE!

BEFORE placing your orders for SUPPLIES, write for prices on 1-Piece Basswood Sections, Bee-Hives, Shipping-Crates, Frames, Foundation, Smokers, etc.

PAGE & KEITH, New London, Wis.

Mention the American Bee Journal.

FOR YOUR NAME AND ADDRESS

I will send my pamphlet **"How I Produce Comb Honey,"** and also my Illustrated Catalogue of **Chaff Hives,** the **Dovetailed Hives, Supers, Sections, Foundation, and Everything Needed in the Apiary.**

First-Class Goods, and Prices Reasonable.

Geo. E. Hilton, FREMONT, MICH.

If You Want Queens

That cannot be excelled for **Business, Beauty,** and all other Desirable Qualities, try my **Italians.** Prices—Untested, 65 cts. each; 3 for $1.75; 6 for $3.25. **Virgins** 25 cts. each. Tested, $1.25. Select Tested Yellow-to-the-Tip Breeder, $1.50.
19Atf Safe arrival guaranteed. **G. E. DAWSON, CARLISLE, ARK.**

"Bee-Keeping for Profit."

A New Revised edition of this valuable work **for only 25 cts.,** postpaid, will be sent by Geo. W. York & Co. or Dr. Tinker. It is full of the latest and most interesting points in the management of Bees, with illustrations of the Nonpareil Bee-Hive, Section Supers, Sections, Queen-Excluders, Drone-Traps and Queen-Traps, etc.; also beautiful direct prints of both Drone and Queen Excluder Zinc and all about its uses. Send for it as well as for my 1894 Price-List of Apiarian Supplies.

Address, **DR. G. L. TINKER,**
6Atf NEW PHILADELPHIA, O.

5-Banded Bees in Iowa.

All my Queens are bred with care by the most approved methods, and from the best 5-banded breeders that can be obtained, and positively cannot be excelled for beauty, gentleness, and working qualities. 15 years' experience. Untested, 80 cts.; 6 for $4.25; 4 and 5 banded, $2.00; straight 5-banded on application. Satisfaction guaranteed.

26A10t **J. E. HAND, Eldora, Iowa.**

Mention the American Bee Journal.

Tested Queens

Reared last fall, from my choice **ITALIAN STOCK, only**

75c.

☞ Ready to ship now. **Hybrids, 25 cts.**

J. A. GREEN, Ottawa, Ill.

1Atf *Mention the American Bee Journal.*

TWO HUNDRED THOUSAND

No. 1 Planer-Sawed Sections, at $1.25 per M. Widths 1 15-16, 1¾, 7-to-foot.

Our No. 1 White Basswood Polished Sections $2.00 per M. Widths, 1⅞, 1¾, and 7-to-foot.

Cream Sections, $1.50 per M. Second Quality Sections, 50 cts. per M.; and all **Other Supplies at bottom prices.** 5 per cent. off on Sections in 10,000 lots.

WAUZEKA MFG. CO., Wauzeka, Wis.

23Atf Please mention the Bee Journal.

CIDER! A LITTLE MORE CIDER TOO!!

You can make a little more cider, a little better cider, in a great deal less time and with a great deal less work on the Hydraulic Press than any other press made. Write for illustrated catalogue of Cider, Fruit Machinery, Spray Pumps, Etc.

DAVIS-JOHNSON CO., Western Agents H. P. Mfg. Co., 45 E. Jackson St., CHICAGO, ILL.

1A9t *Mention the American Bee Journal.*

Our New Style Frame!

Gives better satisfaction than anything we have gotten out for several seasons.

Our Thin-Walled Hive is best & cheapest on the market.

With our **Outside Winter Case** it makes the best out-door Winter Hive—and the cheapest.

We are the **ORIGINAL** makers of

POLISHED SECTIONS

And our goods are acknowledged to be the best—and as cheap as any.

Illustrated Catalogue and copy of—

THE AMERICAN BEE-KEEPER

—Free on application.

THE W. T. FALCONER MFG. CO.,

JAMESTOWN, N. Y.

(Established 14 Years.)

Mention the American Bee Journal.

Woodcliff A No. 1.

In order to introduce my strain of beautiful yellow **Woodcliff Queens,** which are bred from an imported leather-colored Italian crossed with the best 5-banded stock I can procure by **Doolittle** method. I will sell Guaranteed Purely Mated Untested Queens at 75 cts. each. As I produce large quantities of comb honey, I breed principally for large honey-gatherers. Apiaries near Philadelphia.

Address, **Wm. A. Selser, Wyncote, Pa.**

25A10t *Mention the American Bee Journal*

Globe Bee Veil

By Mail for One Dollar.

Five cross-bars are rivited in the centre at the top. These bend down and button to studs on a neck-band. The bars are best light spring steel. The neck-band is hard spring brass. The netting is white with face-piece of black to see through.

It is easily put together and folds compactly in a case, 1x6x7 inches. the whole weighing but 5 ounces. It can be worn over an ordinary hat; fits any head; does not obstruct the vision, and can be worn in bed without discomfort. It is a boon to any one whom flies bother, mosquitos bite, or bees sting.

Extra Nets, 50 cents each.

☞ This Veil we club will the Bee Journal for one year—both for $1.85; or give free as a Premium for sending us 3 New Subscribers to the Bee Journal at $1.00 each.

GEORGE W. YORK & CO.,

CHICAGO, ILLS

Italian Queens & Bees.

Ready in May. Queens, $1.00. Bees by the Pound, $1.00. One-Frame Nucleus, $1.25; 2-frame, $2.25. Also, **Barred P. R. Eggs** for setting: 15 for $1.00.

MRS. A. A. SIMPSON, Swarts, Pa.

13A26t *Mention the American Bee Journal.*

My

Apiary is now stocked entirely with young laying Queens of this year's rearing. Some of them have been laying long enough so that they are tested. I will sell the tested ones at $1.00 each, or with REVIEW one year for $1.75. For $2.00, the

Queen,

the REVIEW, and the book "Advanced Bee Culture," will be sent. I am yet receiving weekly shipments of young laying Queens from the best breeders in the south. These untested Queens I will sell at

75 cts.

each, or with the REVIEW one year for $1.50. For $1.75 I will send the REVIEW a year, one untested Queen, and the book "Advanced Bee Culture." For

10 cts.

three late but different issues of the REVIEW will be sent. The May REVIEW contains an article from M. M. Baldridge, in which he tells how to get rid of foul brood with the least possible labor—no shaking the bees off the combs, they transfer THEMSELVES to a new hive at a time when their bodies are free from the spores of the disease. He also tells how to disinfect hives with one-fourth the labor of boiling. B. Taylor tells how to secure as much white COMB honey as extracted.

W. Z. HUTCHINSON, FLINT, MICH.

Mention the American Bee Journal.

I ARISE

TO SAY to the readers of the

BEE JOURNAL that

DOOLITTLE

has concluded to sell —BEES and QUEENS— in their season, during 1894, at the following prices:

One Colony of Italians on 9 Gallup frames, in light shipping-box	$7 00
Five Colonies.....	30 00
Ten Colonies.....	50 00
1 untested queen.	1 00
6 " queens	5 50
12 " "	10 00
1 tested Queen...	$1 50
3 " Queens.	4 00
1 select tested queen	2 00
3 " " Queens	5 00
Select tested queen, previous season's rearing .	4 00
Extra Selected for breeding, THE VERY BEST.	6 00
About a Pound of BEES in a Two-frame Nucleus, with any Queen, $2.00 extra.	

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☞ Circular free, giving full particulars regarding the Bees and each class of Queens.

Address

G. M. DOOLITTLE,

11A25t BORODINO, Onon. Co., N. Y.

Mention the American Bee Journal.

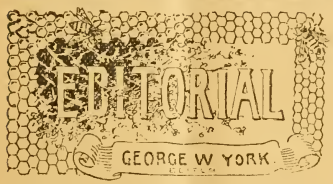
ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Sample Copy Free.

VOL. XXXIV. CHICAGO, ILL., JULY 12, 1894. NO. 2.



Secretary Benton, of the North American, has had some very neat letter-heads printed for the use of the officers in their correspondence relating to the association. Mr. Benton knows how to get up neat and tasty things. He is very painstaking in all his work.

October 16th, 17th and 18th, has been decided upon by the Executive Committee, as the time for holding the next annual convention of the North American Bee-Keepers' Association at St. Joseph, Mo. Better begin now to lay your plans to go. President Abbott wants to have an attendance equal to if not larger than that of last year at the Columbian meeting. Will *you* be there?

An Excursion and Picnic, under the auspices of the Philadelphia Bee-Keepers' Association, was held on Saturday, June 30th, at Woodcliff Apiary, near Jenkintown—Mr. W. A. Selser's queen-rearing establishment. It was a rare opportunity to see the manipulation of hives and methods of queen-rearing by the improved Doolittle scientific plan, Woodcliff being the only apiary of the kind in that part of the State.

Our Special Offer to Jan. 1st, on page 35, has attracted the attention of those who have not been too busy to solicit new names, and consequently they have sent in the subscriptions and secured their premiums as offered. Now, why cannot more of our present readers go to work and earn some of the many excellent books we offer as premiums? It is an easy way to get them—either the books or the new subscribers. Only 40 cents for the BEE JOURNAL from now to Jan. 1st, to new subscribers, and the one securing the new name or names, will receive a premium besides! Why not send in a lot of new subscribers this month, and thus help yourself and also your bee-keeping friends? See page 35 for particulars.

☞ Many beginners make the mistake of thinking they can improve some of the standard hives or implements, and that before they have fairly learned the business.—*Hutchinson.*

Mr. C. O. Perrine, the man noted in time past as a honey-dealer, and who practiced migratory bee-keeping down the Mississippi river on a barge, is now a resident and land owner in Riverside, Calif.; and though the snows of many winters whiten his head, he is still an active business man. At present it is orange-orchards and not bees. So says Rambler, in *Gleanings.* We might add that Mr. Perrine once attempted to feed glucose to his bees, hoping to produce "honey" from it, and nearly ruined his whole apiary. The whole glucose business is no good for the bee-keepers, and its use must be avoided and condemned by them at all times.

Profitable Bee-Keeping, as now contributed in lessons by Mrs. Atchley in the BEE JOURNAL, has been noticed in both *Gleanings* and the *Review*. The former paper says:

A series of lessons in practical apiculture for beginners, prepared by Mrs. Jennie Atchley, is now running in the AMERICAN BEE JOURNAL. So far as we have glanced over them, they are interesting and practical.

The *Review* for June contained this paragraph:

Mrs. Atchley, under the heading of "Profitable Bee-Keeping," is writing a series of interesting articles for the AMERICAN BEE JOURNAL.

Bro. Hasty, in a very brotherly way in the *Review*, hints to the editor of the *American Bee-Keeper* that the "brothering" business in the bee-papers in this country is all right. It was said in the May number of the *American Bee-Keeper* that the reason the editor objected to calling everybody "Brother," was that "the word often does not agree very well with the spirit manifested;" and that the foreign bee-papers were not given to the "brothering" mania. To which the "inimitable" Bro. Hasty replies: "To the (John Bull) dogs with those foreign papers in which they never say 'Brother.'"

The Apiculturist has a new printer, and the change, Bro. Alley says, caused the long delay of the May number of his paper. The *Apiculturist* is in its twelfth year, and seems to be holding its own as well as ever.

A Honey-Section Cover. — We have received a sample of manilla covers for sections. It is a sort of carton, but open on two edges. It was sent us by Mr. H. R. Wright, of Albany, N. Y., and is intended for use when marketing comb honey in the sections. It is fastened around the section with a single small tack.

Accompanying the sample carton, were these suggestions on preparing comb and extracted honey for shipment to the Albany, N. Y., market:

The best style of shipping-case holds five combs long and five combs wide, with honey exposed on only one side of the case. Glass one side of one comb, and put in the centre on the outside, showing the grade of honey in the case. Weight, gross and tare, should be marked with pencil or small figures, keeping the case as free from marks as possible, for it never helps the sale of honey to have the bee-keeper's name on, and sometimes hinders the sale, especially on anything not perfect.

Extracted honey should be put in ¼ and ½ barrels, and light color sold early in the season for best prices.

Mr. S. H. Clark, of Elwood, Iowa, was visited by the editor of the Maquoketa (Iowa) *Record*. Mr. Clark is the popular postmaster at Elwood, as well as a bee-keeping enthusiast. The editor of the *Record* said that Mr. Clark "could deliver a lecture on the subject, 'How to Make Bees Pay on the Farm.'" No doubt he could, and it would be a good one, too.

Honey-Dew and Its Cause.—A correspondent of the *Country Gentleman*, published in Albany, N. Y., recently asked about a "sticky, sweetish substance" found on the leaves of oak trees, to which the editor of that popular farm weekly replied as follows:

The sticky, sweetish substance on the leaves is commonly known as honey-dew. It is a secretion of various kinds of insects which suck the juices of plants. It is characteristic of various species of aphides or plant-lice, and this secretion appears, in some instances at least, to be especially abundant during dry, hot weather. A few years ago the elm trees along the streets of Albany were badly infested by plant-lice, and during a dry, hot time the secretions of honey-dew from these insects were so abundant that the sidewalks under the trees were defiled and blackened by it. The minute drops of the honey-dew, in a favorable light, could be seen apparently dropping from the trees above, but really coming from the insects.

In a recent visit to Lake Mohonk, the foliage of small trees and shrubs in many places there was seen to be wet and sticky with honey-dew. A little investigation revealed the fact that the branches of the trees above were infested by a species of scale insect. Though it was seen on several species of trees, it was especially abundant on oak and chestnut. In some instances the smaller branches were literally covered with the insects, whose broadly oval, convex bodies were in actual contact with each other. In every instance where the honey-dew was noticed on the herbage and shrubs, the insect, if sought, was seen on the branches of the trees above them. Where there were no scale insects, there was no honey-dew.

We do not put much faith in the statements sometimes made that honey-dew is a

direct secretion by the leaves, for we have never seen it where its connection with some insect could not be established.

We find in the honey-dew on some leaves a few threads and spores of some fungus. The fungus usually follows a copious secretion of honey-dew, on which it lives. Probably in a few days or weeks the leaves now besmeared with this substance will exhibit a dirty, blackish appearance, as if soiled with soot. This will be due to the development of the blackish threads of the fungus. The recently introduced pear-tree psylla secretes a kind of honey-dew on which a fungus develops. Accordingly, when we find the spurs and small branches of the pear tree presenting this sooty, blackish appearance, we may conclude that this pestilent insect is present.

A woolly plant-louse, inhabiting the alder and the beech, secretes such an abundance of honey-dew that a black fungus develops from it to such an extent as to form masses two or three inches broad, and sometimes almost as high.

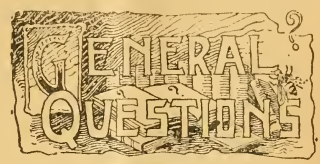
Comb Foundation samples have been received at this office from W. J. Finch, Jr., of Springfield, Ill.—both thin and brood foundation. The latter is exceptionally fine, besides the side-walls are a trifle higher, we think, than any we have seen lately.

Practice What You Preach.—An editorial found in the *American Bee-Keeper*, reads thus:

We wish our friends, and especially our fellow editors, would refer to us as the "*Am. Bee-Keeper*," not the *A. B. K.*, as there are the *A. B. J.*, *B. B. J.*, *C. B. J.*, and *N. B. K.*, and nine readers of every ten will confound *A. B. K.* with one of these if thus referred to. If the *Am. Bee-Keeper* contains anything worthy of repetition, please give us full credit for it.

That's good, Bro. *American!* But why can't you "take your own medicine," and give *full* credit to the AMERICAN BEE JOURNAL when you take anything from its columns, instead of crediting it to "*A. B. J.*," as in your June number? We substitute the name of our paper, and quote with emphasis your own words, as above, namely: "If the AMERICAN BEE JOURNAL contains anything worthy of repetition, please give us full credit for it!"

In other words, please "practice what you preach," and join the majority of editors who have long since ceased the meaningless "initializing" of other bee-papers when referring to them.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Drone-Traps—Queen Mating.

Do you think a queen-trap will keep my bees from swarming? Bees clustered on the inside and on the outside cannot get in or out. I have to take off and clean bees out. I have killed all my black drones out of hybrid colony. Will the queen mate with an Italian drone?

Sandwich, Ont. J. L.

ANSWER.—No; bees will swarm just as soon through a drone-trap, but the queen cannot go, so you can have time to attend to them. The queen may mate with Italian drones, or with any others that are present. I suppose she is more likely to mate with drones from other hives than her own.

Moths in Frames—Queen-Cells.

1. How can moths be gotten out of frames of comb that are not in use? What is the best way to keep frames not in use, so as to avoid this trouble?

2. What would be the natural cause of a good-sized colony not having any queen-cells started at this time of the season?

3. If a colony is made queenless, how soon will they generally start queen-cells? and will they start queen-cells after introducing queen in July? If so, is it best to take them out? E. H. H.

St. Johnsbury Center, Vt., June 25.

ANSWERS.—1. I suppose you mean the larvæ of the moth or wax worms. With a penknife or wire-nail you can get out the large worms, if there are any. Then a good fumigating with sulphur will finish up the little fellows. A second fumigation in a couple of weeks may be

necessary, and if kept in a moth-tight place they are all right. Or they may do well, with occasional watching, by being put in a cool, airy place, the combs an inch or two apart.

The very best thing, however, both to get the worms out and to keep them out, is to give the combs into the care of the bees. Even a weak colony can take care of a good many combs. Put extra stories *under* the story containing the colony. A strong colony can have two or three stories under it, and two over it, but of course you couldn't have them working on sections at the same time. For extracting they would be all right. A colony having only two or three frames of brood can have two stories of combs under them. Italians make better work than blacks at keeping out worms.

2. A poor harvest, plenty of room, or a young queen would help to prevent preparations for swarming, but sometimes you may be so fortunate as to have a colony that doesn't seem to care about swarming when all others in the same condition are crazy to swarm. If you have a non-swarming strain of bees, you have a bonanza.

3. Queen-cells may be found within 24 hours after removal of the queen, but sometimes you may not find them until the third day. It is nothing very unusual for bees to start queen-cells after the introduction of a queen, and it looks a little ominous, but often no harm comes of it. I should rather have the cells destroyed.

Transferring and Italianizing.

Does Dr. Miller think I will make a success of the following operation?

I have a colony of black bees in a dovetailed hive with Hoffman frames. The colony is not strong enough to store any surplus if let alone. The bees have built their combs across the frames, fastening them all solidly together. I want to transfer and Italianize at the same time, and have an idea that the two things may be accomplished in the following manner:

First, make a one or two frame nucleus from another colony; give it an Italian queen, fill up the hive with frames of foundation, invert the hive containing the blacks, and set the hive with the nucleus on top of it, with queen-excluding zinc between. What will likely be the result? E. B.

Leon, Iowa, June 25.

ANSWER.—The result may be all right with some modifications. You say nothing about destroying the black queen in the crooked-building colony. If left where she is I should expect her to remain in possession, the queen of the nucleus being killed. Drum out the colony, kill the black queen, letting the bees return, then in a day or so you may find it safe to put the nucleus over the hive with excluder between. But I hardly see any need of turning the hive upside down.

For safety, I think I should allow the nucleus to have an entrance of its own, without obliging the bees to go down through the other hive, and I would have very little communication between the hives at first. Besides the excluder a heavy sheet of paper might be given, with room for only one bee to pass through, and the bees will gnaw it away in a few days.

If honey is yielding at the time, it will make it safer for the queen.

Swarming Questions.

1. What would be the result if I should hive a swarm with a colony that had cast a swarm two days previous? Would they swarm out the next day, or be content with their new quarters and go to work?

2. I have a colony that cast a swarm on May 23rd. I examined them three weeks later, and could find no brood or sign of queen in the hive. The bees are working nicely, and filling up the brood-frames with honey. Would you give them another queen, or let them finish filling up with honey, and then give the bees to some other colony.

3. I hived a swarm in a new hive, placed an Alley trap at the entrance to prevent them leaving, and faced the old hive to the rear. This was about 10 o'clock a.m.; at 4 o'clock p.m., I discovered the bees leaving the hive quietly, crawling around to the entrance of the old hive and going in. In a short while all the bees had returned to the old home. I could not find the queen. What was the matter?

4. If late in the season a colony swarms, and I keep it from leaving the hive by means of a trap, would they gather surplus in the interval of swarming, or would it be better to let them swarm? F. T. B.

Brookewood, Va., June 16.

ANSWERS.—1. They would probably stay content. This is one of the plans for preventing increase that has been spoken of with favor for years. But it

may be well to be prepared for occasional disappointments.

2. If you leave the bees till they fill up, and then unite, they will be so old they may not be worth uniting. Moreover, they will gather as much, or more, honey if united as where they are, so I would unite immediately unless the number is sufficient to make a fair colony by giving a queen. If you don't care for increase, it may be the best thing to unite.

3. It is not at all an unusual thing for a swarm to return to the old hive. In this case they did not swarm out in a body, because the distance was so short they could do better. Probably in most cases the reason for a swarm returning to the old stand is because of the queen. She may not be with them, or something may be wrong with her. Possibly they didn't like something about their new quarters.

4. The trap will not stop their working, but they'll not work so well while hindered in their plans. Whether best to let them swarm depends somewhat on your own convenience and your after management.

Queenless Colony—Laying Workers.

I have six colonies of bees, and but one of them has swarmed. It cast the first swarm on June 1st, and it did well for the first two weeks, and then had a little brood in the top edge of their combs. Yesterday, when I was looking through them, the brood was all gone, and the combs filled up with pollen. But the strange thing to me is, that they have two pieces of drone-comb built, some of the cells with two eggs in them, and some of them with one. What is the matter with them? Have they lost their queen? and are some of the workers laying?

One more strange freak is, they have now about a dozen queen-cells started on one frame. No. 2 came off June 9th, and it is doing well, and has as much comb built as No. 1, with quite a little brood in four of the frames.

Now comes something else: I thought that I would look through the old one that cast No. 1 and 2, and to my surprise I found the frames filled completely full of pollen, and very few cells of honey, with no brood or eggs of any kind. What is the matter with them? Have they lost their queen? What is the best thing to do with so much pollen?

This is a very bad year for honey around here. All the bees killed off all their drones about three weeks ago, and there are few pleople that have had any swarms at all. The white clover is a complete failure, and if the bees get a living I will think that mine have done well. G. R. M.

Rockford, Ill., June 25.

ANSWER.—You've hit it, first guess. Queen lost, then laying workers. The queen-cells only form part of the regular programme, for it is the usual thing to find the bees trying to rear queens from laying-worker brood. Sometimes the first intimation of laying workers is a queen-cell with two or more eggs in it.

As to the mother colony, it is just possible that the queen was slow about getting to work, but is laying all right by the time you get this. I'm afraid, however, that it is also queenless. If you find no queen laying by the time this reaches you, better not wait longer, but give the bees and combs of the queenless colonies to other colonies. Probably swarm No. 2 would be benefited to have some such addition.

The great amount of pollen in the combs comes from the fact that having no brood and young bees to use it up, the pollen has accumulated in the combs. It can be given to colonies that have a queen, giving only one such comb to each colony.

Perforated-Zinc Queen-Excluder, Etc.

Can Root's queen-excluder, or perforated zinc, be made 1/32 of an inch smaller, and still allow workers to pass through?

My reason for asking is that I have invented a self-hiver which I am confident will be a success, provided that the queen-excluder can be made smaller. In testing the excluder, I find that during the excitement of swarming, about one-third of the queens are crowded through, but that after re-hiving the bees, the queens cannot return into the hives through the zinc. In an out-apiary of 50 colonies I used the excluders to retain swarms, but about one-half of the queens escaped, thereby causing me to lose about one-half of the swarms.

I now have 380 colonies. I have produced from 5,000 to 6,000 pounds of comb honey. I cannot yet give accurate figures on extracted honey, because I am not done extracting. I propose to increase the number of colonies next year to about 800. B. D.

Du Pont, Ga., June 25.

ANSWER.—I think Root's perforations

are about 1/6 of an inch; 1/32 of an inch less would make them about a fifth less, and I doubt if workers would work through that size. From some experiments of my own, notwithstanding the belief that a sixth of an inch will hold all proper-sized queens, I'm afraid that any perforation that will hold at all times a queen crazy to get through, will be too small for workers to work through. Others, however, think differently, and they say my queens that got through must have been small. I hardly believe it.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Letter to Mrs. Brown.

DEAR MRS. BROWN:—Your very sensible letter is gladly received, and as a reply to your practical questions are likely to meet the requirements of other sisters in our "chat" circle, I think best to use our regular medium.

FELONS.—Yes, I quite agree with you that felons are pesky nuisances. They usually afflict people of tender skin and sensitive organization. One might feel a touch of pride in the suggestive aristocratic nature that they most likely visit, were it not for the intense pain these miserable felons give. Then, too, come to think, they are almost too easily acquired to make one feel importantly exclusive! Any little knock of one's hand, especially the thumb, against the sharp corner of a table, or prick with needle or pin, or a little sliver of wood or thorn in the end of a finger, is apt to set up that painful condition we call a "felon."

Many things have been used to arrest the progress of them — salt, soda, lye, pounded mullen leaves, scraped potato, etc. —but the *best* application I know of is to stick the finger into a bottle of tincture of iodine for a minute. Do this night and morning, and begin as soon as you hurt yourself. Don't wait until it begins to throb and hurt real hard, because then it shows that matter is beginning to form, and may be too late. But do it at once, and be on the safe side.

Persons who are predisposed to such accidents should keep, say a two-ounce wide-mouth bottle full, well corked, for emergencies. Its application does not hurt a particle—it simply turns the finger a dark brown. Two ounces will cost a quarter at your druggist, and will last a long time, besides being excellent for many kinds of bruises and swellings.

CONSTIPATION.—For that case of constipation you refer to, you can feel free to promise her a complete cure if she will drink a quart of *hot* water night and morning, and eat plenty of fruit—dried or fresh—especially apples, oranges and lemons, because most acid. But *she must keep it up*—regularly.

O, no! you are quite mistaken. You will be surprised to learn how *easily* one can learn to drink a quart of hot water—and that amount is necessary to flush the system. Less is useless.

SWELLING OF THE KNEES may be due to a variety of causes—but where there is absence of pain, the swelling is never serious in importance. What is termed among surgeons as "house-maid knee," is a swelling of the soft parts on each side of the knee, due, in their case, to scrubbing on their knees. Brisk friction of the parts with strong cold salt and water, night and morning, often dispels the swelling. If results are not satisfactory, try painting with tincture of iodine once or twice per week. That will be most certain to accomplish it.

SNAKE-BITE.—I suppose that snake-bite gave your good sister a terrible fright—but it was quite unnecessary. Garter snakes are no more poisonous than a kitten. O the pocketful I used to carry when a boy at school, to frighten the girls! But that was 40 years ago. Even rattle-snakes are not half as bad as the romancer goes on to tell.

APPENDICITIS.—You want to know what it is? *Don't!* It will only set you to thinking, and the more you think, the less you will know about the miserable fad that surgeons, who are always anxious to cut, would frighten you about. It is only within a dozen years that we have heard of such an accident as appendicitis—yet the world moved fairly well all the years previous. The surgeons have agitated the subject so much (to their interests), and so effectually scared (the rich in particular),

that as soon as they have a colic they begin to fear appendicitis!

But all this agitation is not without benefit, if it makes us sensible enough not to eat our fruit with large seeds whole, like pigs. You would naturally suppose that persons eating cherries, for instance, would reject the pits, but many don't. Nor is it safest to eat grapes with their many seeds, to get into the folds of the stomach and intestines, and there do mischief. But if people will so clearly contravene Nature's laws, willfully or ignorantly, they must take hazardous risks.

How often are blackberries given to babies for summer complaint—often with killing effect! Well, it isn't the fruit that does the evil, but the *seeds* they contain, which, coming on the inflamed mucous surface of the bowels, set up greater mischief, and the undertaker is called in. The blackberries are good, wholesome, and a fine remedy, if care is had to strain the seeds before giving—if *only* the clear juice is administered.

Are your questions answered? If so, good bye. Write again.

Convulsions.

"Yes, Doctor, I was holding him just this way in my arms, when his eyes became set in his head, his little hands clinched, thumbs inside, as you see him, with those big beads of sweat on his forehead, and so pale I thought him dead! I was going to give him some of this medicine, but thought best to send for you first."

Well, little mother, don't be too greatly alarmed. You did exactly right, first to send for advice without giving the medicine. Baby don't need dosing. You prepare a tub of warm water and put a tablespoonful of salt—just common salt—in it, and I'll do the rest. There, now, while the child is in the bath, let us look in its mouth. See how the warm water is relaxing the system?

Ah, there is the difficulty. See how bluish and swollen that gum is, where the eye-tooth is trying to come through. Well—there! just that little bit of cutting of the gum relieves the tension and—see? There's your baby almost ready to smile at you! Keep its feet and stomach warm; feed him a few spoonfuls of *warm* water now and then, and nurse him very lightly; by to-morrow he'll be crowing like a little rooster!

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 6.

(Continued from page 15.)

DISEASES OF BEES.

We will suppose now that two more months have gone by, and this is Sept. 1st, and Harry has heard now that this school has its name up as foul brood inspectors, and he wishes us to go over and examine his apiary. So let us go over, for I hear his bees are nearly all dead, and he has no honey this year. He bought his bees last year from Mr. Jones, and somebody said that Jones lost all his bees with foul brood. I sent Harry word that we would be over today, and he will be anxiously awaiting us.

My! how solitary things look around here. Just look at the hives all turned up and stacked about in little groups. I am scared already.

"Good morning, Harry. The foul brood inspectors are upon you right now. Get your smoker, and let us see quick."

"Well, I tell you," says Harry, "we won't have much need of a smoker, as I have nothing much to smoke. But here, we will open this hive—I see some bees here yet."

"My! close it up. *Foul* brood in its worst form!"

"How do you know?" says Harry.

"Can't you smell that double dead odor—very sickening?"

"Now," says Harry, "just show us all about this awful disease right here, where we may all see with our own eyes."

"All right; I will do what I can to make it all plain to you, though I am a poor hand to explain things, but will take time and pains enough to show you all what foul brood is, and how you may

all know hereafter when your bees have foul brood.

"Now, all circle around this hive, and I will lay this rotten comb down on the cover, and show you what I can. You see this is a bad case—foul brood in a malignant form. It has been in this apiary a year or more. Now, right here, in the center of this comb, is where it started, as you see this rotten, offensive mass. This disease was brought here likely when Harry bought his bees from neighbor Jones, and it began in hive after hive in the center of the combs, and spread like this one until you see there is only a very few cells hatching around the edges, and soon none will hatch at all, and they are gone forever.

"Now look at this ropy substance. See how it stretches; and see these sunken cells with a little pin-hole through the caps of the cells. These holes have been made by the bees, thinking to remove it, but when the cell was punctured, the sickening or disgusting smell caused the scavenger to back out from her job, and thus it goes on. Or the small hole may be caused by explosion, as the air-tight, or almost air-tight, cell may become so crowded with gas that a small hole in the weakest part of the cap (which is the center, as it is farthest from any supporting wall)—I am not going to say just what makes those little holes, but one of these ways seems most likely to be right. But we will pass on by *knowing* the hole is there, for we see it, as it is the things we *know* that we wish to teach.

"This dread disease is like yellow fever, or any other catching disease. It will take hold of its victim at once when properly exposed.

"Now, I will try to show you why dead brood does not produce foul brood."

"Yes, all right; that's what we are anxious to hear."

"First, let me give you the points I wish to make. We have *always* had dead brood, and we have not always had foul brood; as I know I can remember hearing father talk about dead brood, and I never heard of foul brood until after bees were imported to our American shores from distant lands.

"Next, foul brood is a walking or flying 'roaring lion,' blood-thirsty, and kills live brood, not caring anything about dead brood, nor would it ever spread an inch if dead brood was its only show. Its germs will no doubt live in dead brood awhile, but before it *can* start, or make one single bit of progress, it *must* have *live*, *fresh* blood to devour. It is the same with small-pox. What would you think of me, if I should say that dead body yonder will start small-pox? Why, you would likely say I was foolish, as you say small-pox travels through the living, and kills the living, and cares *nothing* for the dead, more than its germs will take hold of a live being, if such is exposed before the germs all die. But *never* will it hunt for another dead body to start again. It is the same way with foul brood. A common air-germ looks after a dead body to start and thrive, and will *not* take hold of decaying matter in freezing weather, nor will a dead substance decay until it is warm enough for air-germs to grow. I believe freezing will also stop the germs of foul brood. But I am not yet able to say that freezing will kill a foul-brood germ, but I know cold weather will check it, the same as common air-germs.

"Now, have I made it plain to you that foul brood does *not* start from dead brood? Well, I will rehearse to you that foul brood has no such a germ as a common air-germ, nor is there any common air-germ that has any part of a foul brood germ about it, as the two are as different as day and night; and to close this lesson on foul brood, I will say that I will endeavor to give you its cure in a future lesson, if I can."

The next lesson will be on Bee-Paralysis or the "Nameless Bee-Disease." Then, before we get through with Diseases of Bees, we will take up everything known as a disease, and treat it as clearly as we can. While I have not seen a real case of foul brood for ten years, aside from specimens sent me, I had a four years' siege of it, and lost 100 colonies of bees by it, and I tell you I learned something about it. I will add right here, that I am firmly convinced, by what I have read about foul brood lately, that it is of a much milder type than it used to be. It is said that the longer a catching disease runs, the lighter it gets. So foul brood may, and I trust will, play out ere long, and be remembered only in the past.

JENNIE ATCHLEY.

(To be continued.)

Weak Colonies—Greenish Pollen.

MRS. ATCHLEY:—Will you please tell us through the AMERICAN BEE JOURNAL, in your department, how to manage weak colonies, as I always read that part first. I notice what Doolittle has

to say about this on page 628. Is your plan the same, or would you make further suggestions?

I see my bees are gathering a greenish pollen. What do you think they get it from? Allow me to express my gratitude for your lessons in bee-keeping we get in the "Old Reliable."

D. BACHMAN.

Grand Prairie, Tex., June 14.

Brother Bachman, I will do the best I can in answering your questions. I have read Doolittle's article you mention, as well as all others he writes that I get hold of, for he is one of our *safest* guides leading out on the long road of apiculture. But as I cannot now remember exactly his words, nor have I time to turn and re-read at present, I will add that where a colony is weak there is a cause for it. To remedy the matter, remove the cause. If your colony has become weak from lack of stores, feed them, and give them a good start off. If they have become weak by a bad queen, move her, and give them a good one. If they are too low to build up rapidly, give a frame or two of hatching brood from other colonies. Watch your honey-plants, and during a scarcity of honey be *sure* to feed enough to keep them building up, and as soon as honey appears in the fields, you will see them build up very quickly.

Now, to build up a colony of bees rapidly (and this is the way we usually like to do it), give them a *good* queen, plenty of food, and bees enough to stay at home and do the house-work, and keep the nest warm to hatch the eggs, and some to spare to work. This, I think, will cover the whole ground of the management of weak colonies. I might stretch out and write a long article on every point that touches upon the management of weak colonies, but I think it unnecessary, as I am sure that if you will follow Doolittle, and heed my remarks above, you have a good plan for building up weak colonies.

In regard to your greenish pollen, I will say that many years ago I kept a large apiary in the valley just about two miles south of your apiary, and I noticed this same greenish pollen. I noticed the bees working on the blooms of a little running vine that grows there, and is now in bloom. Its blossoms resemble a small snow-ball flower, only they are a little reddish hue. If the greenish pollen does not come from this source, I do not know where it comes from.

I am glad indeed that you appreciate my writings. I receive many congratulations from all over the country, and it helps me to brace up, and makes my pencil feel lighter when I read them. I feel proud to know that I am able to help some bee-keepers, even if I have a poor, awkward way of explaining what little I know about bees.

JENNIE ATCHLEY.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

July 19.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec , Steel Creek, N. C.

Aug. 1.—Central California, at Hanford, Calif.
J. F. Flory, Sec., Lemoore, Calif.

Aug. 16.—East Tennessee, at Whitesburg, Tenn
H. F. Coleman, Sec., Sneedville, Tenn.

Oct. 16-18.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Plzer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ **In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
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May-Flowers and Mistletoe is the suggestive name of a book of over 250 pages containing selections of poetry and prose for all seasons, for older boys and girls, from the best writers of the day, with dialogues, motion songs, and drill exercises for smaller children. It is suitable for rhetorical exercises in the school and entertainments given by church, library and benevolent societies. Beautifully illustrated, and each poem or selection set in a colored border. Cloth-bound; size, 8x10 inches; price, postpaid, only $1.00. Clubbed with the BEE JOURNAL for one year—both for $1.75; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year.

Great Premiums on page 35!

Covering for Sections on the Hive.

Query 931.—1. Which is best as cover for sections, enameled cloth, small strips of glass laid over the openings, or a quarter inch bee-space cover?

2. Why?—J. W. S.

I use wide frames.—G. M. DOOLITTLE.

I use heavy Indian head muslin.—MRS. L. HARRISON.

1. The last. 2. It will leave sections cleanest.—C. C. MILLER.

1. I don't know. Ideas and conditions vary.—J. M. HAMBAUGH.

We would use almost anything except the ¼ inch bee-space cover.—DADANT & SON.

I use our regular solid honey-board laid flat on top of the sections.—E. FRANCE.

1. Enameled cloth. 2. It is more easily adjusted, and more easily removed without disturbing bees.—JAS. A. STONE.

1. The cover with ¼ inch bee-space. 2. Less work and less daubing.—S. I. FREEBORN.

1. I prefer the latter. 2. It is more convenient, and I think just as good.—A. J. COOK.

1. Enameled cloth. 2. It keeps the sections clean, and is convenient,—P. H. ELWOOD.

I prefer a thin board with bee-space, but I use a cloth, mostly because the latter is cheapest.—G. W. DEMAREE.

1. A board, a bee-space above the sections. 2. Because it is less trouble, and causes less propolization.—J. A. GREEN.

1. I like a quilt or cloth. 2 Because it is always easily removed. I do not like glass or any hard covering.—MRS. JENNIE ATCHLEY.

1. There is no difference. 2. A bit of shingle is as good as either. I would rather not have a bee-space over the sections.—M. MAHIN.

1. I prefer a cover bee-space from the sections. 2. Because it is easier to examine the sections, and in storifying the supers.—G. L. TINKER.

1 and 2. I prefer enameled cloth, as it is cheap, easy to handle, and answers the purpose better than anything else I know of.—W. M. BARNUM.

1. A flat board cover with bee-space over the sections. 2. Less propolis, less fussing, greater ease and rapidity of manipulation.—EUGENE SECOR.

1. A bee-space between the cover and sections. 2. Because then there is less work, fewer "traps," and less propolis on the sections.—R. L. TAYLOR.

1. Enameled cloth. 2. It lies close to the sections, and prevents bees from coloring the tops, and also is not propolized like anything else.—J. H. LARRABEE.

1. I very decidedly prefer the bee-space cover. Your sections, however, should be protected in some way from the travel of the bees on top.—C. H. DIBBERN.

1 and 2. I prefer a white cloth of heavy twilled goods. Thin boards make a good cover, but much harder to remove than the cloth. I *don't* use enameled cloth.—J. P. H. BROWN.

1 and 2. I don't think either is best, or that there would be any choice. I should prefer something porous, that would allow excess of moisture to escape, while retaining the heat. I assume the question refers to winter coverings.—J. E. POND.

1 and 2. I have used the enameled cloth with good results, also the 5/16 space between the sections and cover. I can see no difference, except with the cloth the sections are cleaner, provided you keep the cloth down smooth over the sections.—H. D. CUTTING.

1. Cloth. 2. Because it can be rolled back gently, without any cracking or snapping; it fills the crack which would give a draft between the super and cover; prevents the same from being stuck down with propolis, and keeps the tops of the sections from becoming stained.—MRS. J. N. HEATER.

1. A cover with a ¼-inch bee-space. 2. Because the bees will not soil the sections as much as they will if the cover fits flat down on the sections. There is a better chance for ventilation, and it will not be so hot in the super during very warm weather. The cover costs less, and is more convenient every way.—EMERSON T. ABBOTT.

Bees Moving Eggs—Carni-Italians.

Written for the American Bee Journal

BY EMERSON T. ABBOTT,

President of the North American Bee-Keepers' Association.

Willie Atchley has a long article on this subject in *Gleanings*, in which he claims that bees never move eggs. The editor says he would like to hear from the queen-breeders, especially Doolittle.

Now, I am not a queen-breeder, neither is my name Doolittle, but I think I have positive proof that bees *have moved eggs*. I am not prepared to say that they make a business of it, but the presumption is that what they have done *once*, they can and will do again.

Several years ago in Dutchess county, N. Y., I obtained a lot of black bees in the fall from farmers who wanted the honey, but intended to kill the bees. I put these bees on foundation, and fed them enough sugar syrup to take them through the winter. As they were all black bees, I introduced Italian queens as soon as I could. The black queen of one of these colonies was killed in some way in making the transfer; and, as soon as they began to draw out the foundation, I saw that they had no queen, and were building queen-cells. There was not an egg of any kind to be found in the hive.

Happening about that time to be in the apiary of a near neighbor who had Italians, I saw one of his weak colonies come out of the hive and leave for the woods. I went to the hive and found a number of small, white, new combs, but no honey. On examining these combs closely, I found that two or three of them were full of eggs. To try an experiment I took two of these combs home and put them in the outside frames of the hive that contained the bees which had neither queen, brood nor eggs.

In three or four days I took the combs out to examine them, and saw that every egg was removed from the cells. On further examination I found a lot of eggs in the center of the hive, and a cluster of bees around them. I also found a queen-cell with a larva in it. This was a new experience to me, and I concluded I must have overlooked the black queen, and she had now begun to lay, but I could not account for the disappearance of the eggs which I had put in the hive. There was no way to solve the problem but to await developments, and I did so.

To make a long story short, in due time the bees had an Italian queen, and every one of the remaining eggs hatched an Italian bee. Where did they come from, if bees never move eggs?

CARNIOLAN HYBRID BEES.

In the same number of *Gleanings* the editor, in speaking of Carniolans crossed with Italians, says:

"Possibly a cross would be desirable, but how are we to distinguish them from ordinary hybrids?"

In reply to this I would say they can be distinguished in the same way that we distinguish black bees from Italians. The progeny of a Carniolan queen mated with an Italian drone does not resemble the bee produced by a cross of the Italians with the blacks, any more than a black bee does an Italian.

In 1886 the writer published a little book in which he said:

"A Carniolan queen mated with an Italian drone produces a very fine and desirable bee. We have a number of such colonies that are very fine workers, and easy to manipulate. Not quite so gentle, perhaps, as the pure bred, but a single puff of smoke sends them down on the combs where they will remain quiet."

More: I want to say that by breeding out the silver-gray color, in a few generations we would have a bee which would show no trace of the gray blood which is found in the Carniolans. I have never seen but one Carniolan queen whose progeny did not show yellow bands, and I have seen a great many Carniolan queens which came direct from Carniola, through Mr. Benton. I want to say further, that pure Carniolan bees bear no resemblance to the blacks.

St. Joseph, Mo.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

Remedies for the Nameless Bee-Disease.

Written for the American Bee Journal

BY C. THEILMANN.

If that perplexing "nameless bee-disease" can be cured with sulphur, then the Australian bee-keeper spoken of on page 775, will be a great benefactor to the bee-fraternity, as the cure is cheap and simple, and probably just the remedy.

I have been studying on this disease considerable for the past six or eight years, and tried a great many remedies, but failed in all except one, and that is by taking frames of brood and bees from other colonies and exchanging them with the affected colonies. But in bad cases it would take three or four, and sometimes five, frames before they were cured. I give the frames at intervals of from five to eight days, generally two frames the first time, and one after until cured.

From the nature and actions of the diseased bees, I have always thought it was either a parasite or fungus, upon which I have heretofore expressed myself in the BEE JOURNAL. Knowing that sulphur is a good remedy for such things, yet it never occurred to me to try it.

To exchange queens, as some have recommended, has always failed with me. Salt and rain water has cured many colonies that were only slightly affected, but in bad cases it would do no good, and the frame remedy was the only thing I have ever tried that would effect a cure every time; and the frames exchanged have no bad effect on the healthy colonies, but sulphur, in the way described, would be preferable.

After seeing the remedy in the BEE JOURNAL, I went to the apiary and applied the sulphur on two colonies which were slightly affected (the only ones that were diseased). I sprinkled the frames of one, which quieted the bees immediately. I sprinkled the other at the entrance, which made them furious, and many of them killed each other for a minute or two, and then quieted down. I will report results on the disease hereafter, as it is too early yet.

My observation of the origin of the disease leads me to believe that the bees get it from the plants they visit, the same as other stock (cattle and horses) get the so-called scabs from the plants they come in contact with. Here would be something to study for the experiment stations, that would be of much interest to our industry,

My bees are living from hand to mouth. They work on the plan of the little poetry that I saw in the BEE JOURNAL lately—they scratch and bite, and gather honey all the day, and eat it up at night. They get just enough for brood-rearing. They are overflowing with bees, but I have not as yet (June 23rd) seen one particle of new wax in the hives anywhere, and consequently I have put no supers on any of them.

Linden will open in a few days. It looks promising.

Theilmanton, Minn.

A Home in the Sunny Southland.

Written for the American Bee Journal

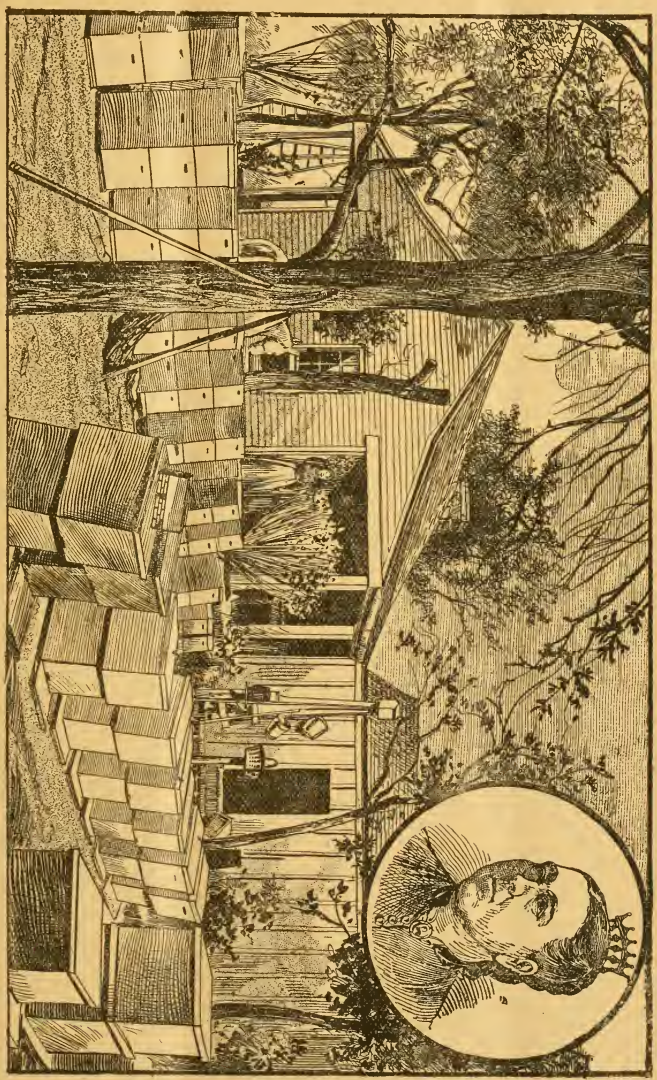
BY MRS. S. E. SHERMAN.

The illustration on the next page gives some idea of my apiary, though considerably less than half the hives show in the picture. The house is larger and much better than it appears. It was a box house, and when I got the place I had the strips torn off and weather-boarded on the outside, and ceiled on the inside, making it a very comfortable house. The kitchen and dining room, which are one, is ceiled overhead, then canvased and papered. All the floors are carpeted except the galleries and honey-room, which are painted.

This engraving was made from a photograph taken on Dec. 28, 1888. The engraver lengthened out the cut and added those clumsy boxes, or as I suppose he thought, hives in the right corner; also the dining-room is lengthened out. The door is in the center, and not near one end, as he has it. This was perhaps done to make room for my photograph. If you will notice, he has no entrances for the hives—maybe he did this on purpose to shut the bees in to keep from stinging me while on my high perch. I am naturally dizzy-headed, and should the bees sting me while up so high, I might come down with a great fall.

I have six yards, or breeding pens, as they are generally called, for my fine chickens, all of which are arranged so that I can feed the chickens in each and every pen without going outside the house at all. This is very convenient, especially during bad weather.

A large tank cistern stands at the corner of the dining-room, and just to the right of it is the bee-tent. South of the tent and dining-room are two double rows of bee-hives, 7 feet apart, facing



The Home and Apiary of Mrs. Sallie E. Sherman, at Salado, Bell Co., Texas.

each other, then 14 feet apart, and the other two rows facing each other, so I can see every hive from the back gallery and dining-room, also from the south bed-room.

Going south through the main street is a gate which leads into the cow shed, barn, stable, etc. North of the house is a nice little orchard of 40 fruit trees. At the east end of the orchard is the large hen-house for the outside chickens. Both east and west of the house, etc., is a nice little pasture—on the west is Johnson grass, and on the east millet. I will have the Johnson grass cut the second time now in a few days.

I have taken 2,200 pounds of extracted honey to date (June 25), this season, with fair prospect of more to follow soon, and good prospect for a fall flow.

We have four churches in Salado, and two splendid schools that can't be surpassed in Texas.

It is a healthy location, with plenty of water the dryest years that we ever have. There are everlasting springs bursting up all along the side of the creek.

My place is in a beautiful grove of live-oaks and elms. It is also off from the street, which makes it much more desirable for an apiary. There are two acres of ground between the apiary and street.

Getting the Most Surplus Honey.

Written for the American Bee Journal

BY JOS. E. POND.

How can we get the most surplus in a given season?

The above query is simple, and easily answered, if one takes into consideration the fact that answers must not be applied locally, but generally. Localities vary in their conditions as do seasons, and we must apply our information to the location and the climate in which we keep our bees.

Generally speaking, however, the rule is strict, that we must have forager bees, and plenty of them, at and during the nectar-yielding season. To determine this, we must *know* the flora of our locality; for knowing this, we shall know how to get ready for our honey crop.

We will start, then, with the fact that it is practically 21 days from the egg to the bee emerging from the cell. Early in the season we must give these young bees 15 days or so, ere they become foragers; but during this time they are not idle, by any means; they do the nursing and the home-work until they become able to forage advantageously.

With the above factors, and the added factor, that if the queen "is any good," brood-rearing is constantly going forward, the problem is easily solved, theoretically; Experience will teach us the rest, and if we follow her teachings as we ought, we shall have no trouble in getting our honey crop, if there is any nectar to gather.

To sum up, the rule is this: Know where there is nectar to be gathered, and have your foragers, and plenty of them, to go for it. To be sure, it requires common-sense, diligence and knowledge, to bring about the required result. But so it does to be successful in any pursuit in life; and be sure of one thing, don't ask "A," who lives in "Alaska," when nectar is ready to be gathered in his locality, and apply the answer to your own surroundings; but study your own field in those respects, and work your bees in accordance with the knowledge thus gained. Thus shall your hives be stored with honey, and your bees wax fat and vigorous.

North Attleborro, Mass., June 22.

Visiting in Iowa—Honey Prospects, Etc.

Written for the American Bee Journal

BY W. C. NUTT.

On May 18th I started on a trip to Hardin and Grundy counties, Iowa. I stopped over Sunday with Mr. O. B. Barrows, ex-mayor of Marshalltown. (He was mayor from 1874 to 1877). He keeps about 100 colonies of bees, almost in the heart of the city. Mr. Barrows is an enthusiast in the profession. He produces comb honey.

While mayor of the city, the extensive water-works, of which the people of Marshalltown may well be proud, were put in. We visited several places of interest, consisting of the water-works, cemetery, glucose factory, soldiers' home, etc. Iowa may well feel proud of her home for the soldiers.

Mr. Barrows informs me that the glucose works consume from 3,000 to 5,000 bushels of corn every 24 hours. Where does all of the glucose go? Echo answer, "Where?"

My stay with Mr. and Mrs. Barrows was a pleasant one.

Monday morning found me on my way to Hardin county. At Eldora I visited

Mr. J. E. Hand. I staid there from noon to eve of the next day.

Mr. Hand has three apiaries—one about 9 miles north, on the Iowa river, a small one at home, and a very fine one about 7 miles southwest of town. We visited the latter apiary in the afternoon. It consists of 76 colonies, mostly in chaff hives, and mostly Italians. They were in excellent condition, and very docile, as we went among them without any protection. There was at the time a dearth of honey, on account of the drouth, and I got but one sting on the finger.

Mr. H.'s home apiary he intends devoting to queen-rearing. He seemed to take great pleasure in showing me a $10 queen. Her bees are beauties.

The next day we visited Mr. Hand's apiary north of town, going by the way of Steamboat Rock, so named from a large perpendicular rock on the Iowa river at that place, which to the imaginative mind may look some like a steamboat, but it was no "sight" to Mr. Hand, he having spent from January to April in California.

At Steamboat Rock we visited Dr. Caldwell's apiary, consisting of 86 colonies. He uses the 8-frame hive. I think that he has about the nicest bees I ever saw. The Doctor was not at home, but Mrs. Caldwell seems to be a lover of the bees, and I understand she cares for them mostly herself.

Mr. Hand's apiary north of town is a house-apiary. He thinks he is going to like it, but it has its objections, as we found out to our sorrow. It was locked, and the windows fastened down. On putting his hand in his pocket for the key, he found that he had left it at home—not a very pleasant finding out, after we had come 9 miles through the hot sun and dust, to see the inside of that house. But the bees spoke for themselves from the outside. They were blacks, and were awfully cross. But we had to content ourselves by going up on the hill, and looking at a 40-acre patch of young basswood, which Mr. H. reserved when he sold his farm.

After dinner (at Eldora) we visited the Industrial School for boys. There are at present 447 boys there, that are well cared for, and seem contented. If more of our boys were cared for in the same way, I think that we would have fewer tramps. There are 1,000 acres of land belonging to the institution.

My stay with Mr. and Mrs. Hand was one I will look back to with pleasure.

In Grundy county I visited Mr. Roney and Mr. Stubbs. I staid all night at the latter place. I think that each has about 25 colonies of bees. They do not make the bee-business a specialty. Each has large farms that are much more profitable to them.

I arrived home on Friday, June 1st, having spent two quite pleasant weeks at both business and pleasure.

I have two apiaries containing about 40 and 60 colonies respectively—one on the north and the other on south of Skunk river. Both apiaries are in splendid localities for basswood, which is blooming, I think, as full as I ever saw it; but it has begun to rain, and I am afraid that it will spoil our crop of honey from that source.

White clover was a failure on account of the drouth. If basswood fails us, prospects will be discouraging, indeed. Basswood began to bloom about June 21st.

Lynnville, Iowa, June 25.

Stimulative Feeding of Bees.

Written for the American Bee Journal

BY C. E. MEAD.

I have tried it for the past three seasons, and it has been a positive loss. It excites the bees, and they fly out in our changeable weather, and get chilled and never get back. I fed in 1892 some extra strong colonies that I feared were short of stores, and I could not unpack them as the season was cold. Smaller colonies with plenty of honey beat them badly.

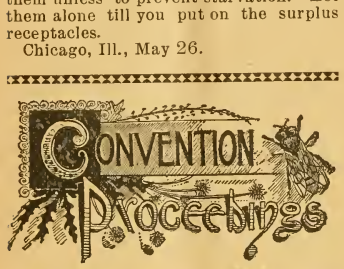
In 1893 I fed to prevent starving, as we had cold, rainy northeast winds from May 10th to July 4th. My bees were no stronger July 4th than May 10th, with no field bees, and not more than two pounds of honey to the hive. They did not increase in weight till July 16th, as all of the old bees were caught in rains and killed.

This year I fed two colonies that I felt a little uneasy about, and as we have had changeable weather since, they are weaker in bees and honey than they were when I fed them. The colonies that were not fed, and are strong in honey, are the best. I have only unpacked a few of my bees so as to clip the queens' wings; ½ have queen-cells started, and some are capped over. Four nuclei are even stronger than the full colonies were last year. My experience runs thus:

Have from 30 to 40 pounds of honey

in the hives on Sept. 30th; if not, feed. Give full-sized entrance, no upward ventilation; pack them as warmly as you can on the summer stands, contract the entrance in April so as to make them uncomfortably warm, and do not feed them unless to prevent starvation. Let them alone till you put on the surplus receptacles.

Chicago, Ill., May 26.



Central California Convention.

Written for the American Bee Journal

BY J. F. FLORY.

The first quarterly meeting of the Central California Bee-Keepers' Association was held at the City Hall, in Hanford, Calif., on June 6th. On account of the rain the day before, and the threatening aspect on the day of the meeting, only a few were present.

Neither President nor Vice-President being present, Mr. C. F. Flory was called to the chair. The minutes of the last meeting were read, corrected, and approved.

SHAKING PALSY.

Mr. J. F. Bolden, of Tulare, had used the 30 drops of carbolic acid to a gallon of honey, as recommended at our last meeting, pouring the honey in the hive in the evening, tipping the hive back, to prevent running out. He also sprinkled powdered sulphur on top of the frames of the others. Both plans seemed to prove effectual, and it is to be hoped that others will try the sulphur cure and report.

SWARMING.

Which is considered the better, natural or artificial swarming?

It was pretty generally admitted that where bees swarm on time and enough, it is best to let them do so; but if not, and increase is wanted, increase by dividing should be resorted to.

Which is the more profitable, to divide your colonies, or buy them at $1.00 per swarm, the purchaser furnishing the hive?

This was answered thus: Where the most of our honey comes during the middle, or latter part of the season, it is best to divide them, as they could be be built up strong until then; but if the most of the honey-flow came during and after swarming-time, perhaps it might pay best to buy them.

HONEY RESOURCES.

It was generally agreed that alfalfa is the leading honey-plant in this valley; that camphor-weeds frequently furnished a good flow of fine honey, and that the alkali and other weeds and wild flowers frequently furnish considerable honey of a less favorable grade.

SPECIAL MEETING.

There seemed to be a universal feeling that we should have a special meeting between this and our next quarterly meeting, on the first Wednesday in September, to consider the question, How to best dispose of our honey? Those that sold for cash f. o. b. were generally satisfied, but many of the consignments were unsatisfactory. Parties shipping 400 cases of comb honey, and others of a less number, have no returns. Quite a feeling prevailed against those

COMMISSION-MEN

doing business in that way. And right here is where one of the great advantages of our social gatherings come in. The men that deal either fair or unfair are prominently brought to public notice.

It was decided to have our special meeting on the first Wednesday in August, at Hanford.

QUEEN-REARING.

Mr. Orr thought the Doolittle method was perhaps the best, although he had never tried it.

Mr. Stearns put several frames of just-hatching eggs into an empty hive with a goodly number of young bees, and then removed a colony to another place, and put the new colony in its place, and thus secured his queens.

The Secretary uses a modification of the Doolittle plan, and got queen-cells anywhere and in any way he could. He cuts them out, and by means of melted wax, sticks them on what he calls a "slide," and puts in a frame holding from 16 to 24 slides with cells, and removes the larvæ in the cells, and then transfers into them larvæ from select

stock. He has practiced the transferring process for 33 years, and thinks more highly of it than ever.

BEE-HIVES.

The size and style of hives elicited quite a discussion, as quite a variety of hives are used. Messrs. Orr and Stearns, of Salem, both large honey-producers, have used both the 8 and 10 Langstroth frame hive, but decidedly favor the 10-frame.

Mr. Gilstrap used a 10-frame hive, two inches shorter than the Langstroth frame, but if commencing again he would use the regular Langstroth frame. The Secretary used a 10-frame hive, the frame being 6x15 inches in the clear, and he preferred them, for many reasons given.

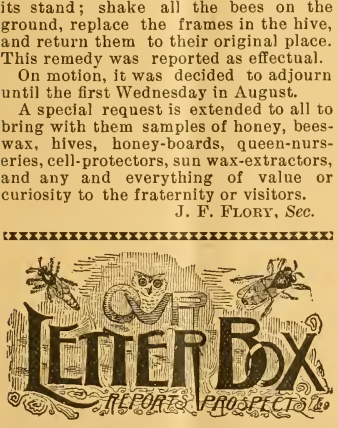
LAYING WORKERS.

The most effectual plan given was to remove the colony some distance from its stand; shake all the bees on the ground, replace the frames in the hive, and return them to their original place. This remedy was reported as effectual.

On motion, it was decided to adjourn until the first Wednesday in August.

A special request is extended to all to bring with them samples of honey, beeswax, hives, honey-boards, queen-nurseries, cell-protectors, sun wax-extractors, and any and everything of value or curiosity to the fraternity or visitors.

J. F. FLORY, *Sec.*



☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Spends His Time in the Apiary.

As I spend most of my time in the apiary now, I find the BEE JOURNAL indispensable. At present I have 46 colonies, spring count.

A friend and I visited Mr. B. Taylor's apiary, at Forestville, Minn., the past spring. We were much pleased with Mr. Taylor, and felt well repaid for the drive of 15 miles, having gathered a store of valuable information. T. J. RICHARDS.

Lime Springs, Iowa. June 29.

Gathering Honey—Catching Drones.

My bees wintered fairly well, and built up nicely until it commenced to rain so much, and that put a stop on them for nearly a month, but they are in good condition now for business, and are at it, both in swarming and gathering honey. I have had 17 swarms to date, with 20 colonies, spring count. I am putting second swarms back.

I have a new way to catch drones. I reverse the drone-trap with a cone small at one end to let them out of the hive, and you will catch them from all the hives in the yard. They hear them, and come there to get in, and of course they do. Perhaps others have done the same, but I have not seen it in the papers I read, so I mention it. Let others try it, and see how soon they will get a trap full. CHARLES TAREY.

Houghton, N. Y., July 1.

Basswood Honey.

My bees have been to work on basswood for the last five or six days, and they have filled the hives full. It is the first basswood honey in ten years. R. MILLER.

Compton, Ill., June 30.

Best Year for Bees.

The AMERICAN BEE JOURNAL comes promptly every week, and it is a source of great pleasure for me to peruse its pages. I am in the bee-business more for pleasure than for profit, but I am getting more pleasure this year than I bargained for. I have 35 colonies, and they keep me whooping up to keep up with them, and do such other work as I have to do. I have one colony that I have extracted 112 pounds from, and there is about 50 pounds that is nearly ready to come off (hence the pleasure). This is the best year for bees that I ever saw, and if it continues seasonable, it will be equal to California.

S. F. OZBURN.

Meridian, Tex., June 25.

Making and Wearing a Bee-Veil.

Having read with interest the ways of making and wearing a bee-veil, I feel called upon to add my experience. As I was reading Miss Wilson's article about veils, I thought she might have struck the same plan that I did, but she didn't. This veil gives me perfect satisfaction. I find a bee-veil to be a very handy thing, and the most surprising thing is the amount of courage it will add to the wearer. I tried to work one day this spring without a veil (before I made one), and one bee took her spite out on my eyelid, and that eyelid received much sympathy. All the rest of the face was in sympathy with it for about three days. So you may know why I wear a veil.

Now for the veil: If you don't understand all, just guess at the rest. Get a strip of mosquito-bar (depending upon how

big and long you want it), and sew the ends together to make it circular in form. Hem both ends with a broad hem. Get a common straw-hat (white), with a broad brim. Take now a piece of hat ribbon or rubber cord, and cut it to draw tightly around the crown of the hat. Put this cord in the hem, as you would run a draw-string. It will then bind to the crown of the hat, and project over the rim.

Now, through the hem of the lower side of the veil run a rubber cord the same way. Have this cord a certain length, or just long enough to hang loosely around the neck, and lop a little over the shoulders. Get a couple of shoe-strings (any string will do), and cut in halves; tie a half string to this lower cord just so one string will hang before and one behind each shoulder. Now tie these strings middling tight, and the rubber cord (if the right length) will run over the tops of the shoulders and down a little piece, and then straight across the breast and back. This boundary cord then will stick as close all around as your skin.

If you get hungry for honey, or want to put on your spectacles, just run your hand up between the rubber cord and your breast, and it will have plenty of room. After the start is made, nature will find your mouth or eyes.

You may raise the objection of surplus material before the eyes. I will say that the top and bottom is on a draw string, and can be gathered at the sides and left clear in the middle. M. B. GOLDEN.

Dunbar, Pa.

Bees Did Fairly Well.

Our main honey harvest has just closed for this locality, and bees have done fairly well. L. DICKERSON.

Denison, Tex., June 29.

Working in the Supers.

I put out 40 colonies of bees in the spring, and have not increased them very much as yet, but they are all working in the supers, and they are doing nicely. The prospects are good. FRED BOTT.

Wabasha, Minn., July 5.

Wintered Well—Getting Honey.

I wintered my bees on the summer stands, and have not lost a colony in three years, or since I commenced bee-keeping. I always have them on the summer stands. I have 20 colonies, and they are all working in the sections at this time. They had commenced swarming on May 1st, but rain set in for three weeks and stopped them, but now they are at work again. A swarm that came out on May 1st, has given me 64 pounds of comb honey, and the parent colony 48 pounds, at this writing; and I get 25 cents per pound for the honey.

JOHN H. BECHTLE.

Reistville, Pa., July 2.

Bees Did Nothing—Sweet Clover.

Bees did nothing up to June, but there is some swarming now. I think they will get winter stores enough. I have 14 colonies, and my surplus was 30 pounds; last year 12 colonies and 300 pounds of honey, and I left plenty for winter stores, and to last them through the cold spring. March, April, June and July are the honey months here. If I had something that would furnish sweets for the bees through May, it would help me in the business. I don't think there is enough nectar gathered to keep up brood-rearing through May sufficient for the honey-flow, which comes about the first of June.

I am much interested in the subject of honey-producing plants, and all other letters published in the good old BEE JOURNAL, which I expect to read as long as I keep bees, or have money or credit.

I have one-half acre in sweet clover. It was sowed on March 26, 1894, but it has been dry for six weeks, though on an average it is knee high. M. W. GARDNER.

Bankston, Ala., June 24.

Having a Flow from Basswood.

We have a honey-flow now from basswood. My spring number of colonies was 21, which I have increased to 40. I do not want any more swarms after this. We generally have a good honey-flow in the fall on the island.

I cannot afford to be without the BEE JOURNAL. F. YAHNKE.

Winona, Minn., June 29.

A Delayed Spring Report.

On April 21st bees were in advance of other years. I took my bees out of the bee-house on March 19th. All seemed to be in good condition, and I left them out nearly a week when it began to get cold, and I put them back into the bee-house. The mercury ranged from 16 to 8 degrees above zero up to March 30th, when it began to warm up, but the wind was raw and cold. On April 7th it began to snow, and some thought it snowed 12 inches or more, but it was thawing all of the time—on April 8th or 9th it nearly all thawed off, and on the 10th it began to snow, and there was no let up to speak of until the morning of the 12th, when the snow was from 24 to 26 inches deep on the level.

I took my bees out the second time on April 17th and 18th, all alive and in good condition. Two colonies out of the 89 were two and three frame nuclei, the frames being the same as in my (hives) 11x16, inside measure. I set those nuclei out in hives, and gave them frames of honey for their winter stores. After they were out a few days, I looked them over, and found five frames in one and seven in the other nearly all covered with bees. I have not had time yet to look my bees all through, only to raise the honey-boards and see that there were plenty of bees. I looked through

a few colonies on April 20th, and found considerable brood (some had drone-brood) in all stages, and some were hatched out. My experience does not coincide with B. Taylor's, on page 500, where he says he thinks they are not going to winter well on account of being all old bees.

The season of 1893, in our section, was the poorest, I think, I ever witnessed, the drouth drying everything up so that there was no honey to speak of in this neighborhood. After June 30th there was but little of the golden-rod that budded out to blossom, and it was the same with the wild aster.

About July 10, 1893, I hived a swarm that filled its hive and 55 one-pound sections with honey, about two-thirds of it being red honey. Last year we had no buckwheat bloom to speak of, so you may imagine they quit brood-rearing very early in the season. I think that accounts for their starting in breeding in the bee-house. My bees averaged a great deal heavier with bees when I took them out than when put in for winter.

On May 2nd here bees were rolling in the pollen and storing some honey. When putting on some supers a few days ago, I was looking in some of the hives and found plenty of queen-cells under headway, and a good many with eggs in them. I think they will be swarming by the 10th or 15th, if they have no drawback. Apple and raspberry bloom will be right along; cherry and plum are now here, so that I think we are far in advance of last year.

ANDREW M. THOMPSON.

Canaseraga, N. Y., May 9.

Honey-Boards, Supers, Etc.

As there has been so much in print about honey-boards and supers, I am sometimes at a loss to know which one of them deserves the most attention. For me, a honey-board should be as thin as possible, and should be so perforated as to fit the openings in the sections. These honey-boards may be tacked on the super, and the sections placed directly upon them; or, if the super has the patent slats, they should not be thicker than $\frac{1}{8}$ of an inch—yes, 1-16 of an inch would do, if they would not warp too much, and they will not if proper care is taken of them. But why not get the slats made of zinc or tin? then they will not warp nor rot, and will last a lifetime. And how much cheaper they would be in the end than honey-boards and wide frames, and how little room they would take when stored away.

"Now," says one, "I have no use for them, as I use a T super." Very well, but your sections are travel-stained and propolized, and that is an objection to first-class comb honey.

One says, "The patent slats above described are too thin, and will sag in the center." So they would, if you had not already one or two thin wires strung across the center of the super. I use three wires, about the size of broom-wire, one on each end, and one in the center of the super. Place the super on a table or bench, and put the slats in, then put the sections and separators in, using from two to three or more separators for a wedge-board, according to the space to be filled. Push the wedges down, and the job is finished. You see in this way I have a honey-board on each super. This is a very simple and cheap honey-board and super bottom combined.

The object of these thin honey-boards is to bring the sections as close to the brood-frames as possible, for close observation has proved that the closer the sections are to the brood-nest, the quicker the bees will work in them.

One more thing I would like to call attention to, and that is to allow the bees to get on top of the sections, for this hastens comb building in the sections. Somebody once told me that the bees on top of the sections were loafers, but that is not so, for I have found out differently. If one will take notice, he will find these bees gorged with honey, and many times see the little wax scales on the lower side of their abdomen, as the bees go down the sections. In these supers I produced 300 pounds of as fine honey as I ever saw, and as I think I ever will see, for it was perfect. If I could only get a perfect method of wintering bees in this latitude, then I would be satisfied with bee-keeping.

My bees, up to March 6th, wintered 75 per cent. better than they did the winter before, but not perfectly, for about one peck out of 21 colonies were dead on March 6th. The cause of this I do not know. One colony got the diarrhea, but none of the rest showed any signs of it.

I hope that some of our old veterans will soon give us a method by which bees will winter perfectly, but until then I will keep on practicing, and give my experience.

I am well pleased with the AMERICAN BEE JOURNAL. It is a school to the beginner, and those famous old bee-keepers are its teachers. But around here the bee-keepers think they know all about bee-keeping, and don't need any bee-paper, and most of them had no honey last summer.

Chippewa Falls, Wis. AUGUST BARTZ.

Another New Bee-Hive, Etc.

I have been experimenting for some time to get up a bee-hive to prevent the bees swarming, and to get more honey in the sections. I think that I have the hive completed to prevent the bees swarming, and average more honey per colony than in my old style of hive, which is as good a hive as any except the new hive.

I do not claim that a colony in my new hive will store more honey than any other strong colony that is in a good hive and does not swarm, but I say on an average I can take more surplus honey from the bees in this hive, because I have the control over the bees to prevent their swarming. I also have the control over the bees, so that they must go in any part of the hive

where I want them to go, and if the young queens are successful in returning, I have three queens in each hive when the honey season is over. I have then plenty of queens for re-queening.

I can winter two full colonies with eight combs each in this hive. I have wintered three colonies successfully on the summer stands—two with five combs each, and one with six combs. I have eight entrances in the hive. The hive I have in one chamber before the honey season opens. A few days before the honey season opens I make it into three chambers—one working chamber, and two nursing and hatching chambers. I will give this hive another season's trial before I say more. I will report later how the bees do in this hive this season.

Bees did well this spring. The honey season is just opening, and I am getting my bees ready in the new hives to put on the sections. We have had a great rain storm the past few days ; if it continues a few days more, it will be a drawback to the bees, for the flowers are just coming into bloom. J. F. H.

Mount Joy, Pa., May 21.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65 ; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

Bound in paper cover, postpaid, 65 cents; or given free as a premium for sending us two new subscribers; or clubbed with the BEE JOURNAL a year—both for only $1.40. Send all orders to the BEE JOURNAL office.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of last number of the BEE JOURNAL for description and prices.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

Honey & Beeswax Market Quotations.

ALBANY, N. Y., Mar. 23. — The honey market is very slow now. The demand is about over on comb. Some extracted wanted at 6c.; If dark color, 5c.
Beeswax, 26@27c. H. R. W.

BUFFALO, N. Y., May 14.—Trade is very slow, and we have still a liberal stock on hand. We quote: Fancy comb, 13@14c.; choice, 11@12c.; dark and common grades, 8@9c. Beeswax, 25@30c. B. & Co.

CHICAGO, ILL., May 10.—The market for comb honey is not of large volume at this season of the year; a fine article of white comb brings 15c. in pound sections. Extracted slow of sale, at 4@6c. Beeswax, 25c.
R. A. B. & Co.

CHICAGO, ILL., Mar. 24.—The honey market will be very quiet for the balance of the season. We will not do much business until new honey comes in. We cannot quote prices but will obtain the best possible price on what little stock we will sell until early fall. Beeswax is very active at 25@26c. J. A. L.

CINCINNATI, O., June 19.—Demand is slow for all kinds of honey. The range of prices is 4@6c. for extracted, and 12@14c. for best white comb. There is no sale for dark comb honey at any price.
Beeswax is in fair demand at 23@25c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, MO., Apr. 6.—We have had an exceedingly slow trade on honey this season, and prices ruled comparatively low. We quote to-day: No. 1 white comb, 1-lb., 14@15c.; No. 2, 13@14c.; No. 1 amber, 12@13c.; No. 2, 10@11c. Extracted, 5@7c.
Beeswax, 20@22c. C.-M. C. Co.

NEW YORK, N. Y., May 25.—New crop of Southern honey is arriving freely. The market is well supplied and demand very light. We quote: Common grade, 50c. per gal.; choice, 55@60c. Beeswax is firm at 28c
H. B. & S.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C F. MUTH & SON, cor. Freeman & Central avs

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. } DEVOTED EXCLUSIVELY—TO BEE-CULTURE. { Sample Copy Free.

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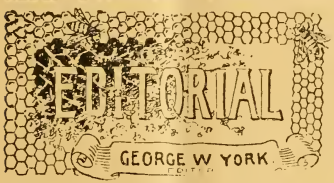


The Canadian Bee Journal has just completed its first year under the new management. It has improved wonderfully since its Brantford owners took hold of it, and we hope it may continue to evidence signs of "going on to perfection."

Extract the Dark Honey.—The *Progressive Bee-Keeper* says that James Heddon advises getting all the white honey stored in the sections, and extracting the dark fall honey, as the latter brings about as much in the market when extracted as it would in the comb.

The North American Convention, as announced last week, is to be held at St. Joseph, Mo., on Oct. 16th, 17th and 18th. President Abbott is very desirous of having all who expect to attend that meeting, to notify him by postal card or otherwise *at once*, as it will aid him very much in getting reduced rates on the railroads. Please attend to this little matter now, before you forget it, and thus do your share in assuring a successful meeting. We trust that there may be a general rally of bee-keepers at St. Joseph in October—even a larger and more enthusiastic company than was at the Columbian meeting last year, if that is possible.

Prospects for the Honey-Flow.—In *Gleanings* for July 1st we find this editorial item on the honey prospects of the country:

For the last ten days the prospects have been rather discouraging. Reports seemed to show that there was very little white clover anywhere in the country; and in our own locality scarcely any could be seen in the old pasture lots, where years before it abounded freely. It is still early to speak for outside localities; but in our own the white clover is just beginning to make its appearance. Basswood, too, is just opening up. The conditions for a honey-flow from this source were never better. The trees are literally full of flower-buds; and where the blossoms have opened up, the bees are humming around them as in the old-fashioned way, and already are beginning to drop in at the entrances; and as early as the first break of day there is that roar that sounds sweeter to the bee-keeper than music. Reports everywhere speak well of the prospects from basswood.

☞ Some claim that it is not fully settled that the queen deposits the egg in the queen-cells at the time of natural swarming; but my assistant saw her do it, and so have others, while the position of the eggs in the cells proves it, even had no one ever witnessed her in the act.—*Doolittle.*

Awful Heat in Texas.—On July 12th we received the following letter from Mrs. Atchley, telling about the awful heat at Beeville, Tex., on Monday, July 2nd:

DEAR BRO. YORK:—I have a sad thing to relate. On last Monday we had a hot wind that began to blow from the north about noon, and the heat increased until the thermometer indicated 114 degrees in the coolest part of the house. The house and furniture, and in fact everything, became so hot that it could not be touched. Fortunately, we have a pipe and hose that leads

water from our large tank to any part of the house, and we kept alive by keeping the house and beds wet with water. We had to keep the children in a shady place kept wet all the time.

Our bees suffered fearfully. Nearly all our nuclei were damaged or killed outright. The strong colonies went through all right, as they were able to keep fanned cool—shade made no difference, they all suffered alike.

We did not know the extent of the damage until our out-yards were visited. Bees were parched as dry as powder; combs and honey boiled out of the hives. A bee would die outside the hive in a moment.

People that did not have plenty of water handy had their faces blistered. We have only a few untested queens left that were in our strongest nuclei, but I hope to be able to fill all orders promptly until we can form more nuclei from our strong colonies, and rear more queens, which we have been busily doing since the hot day.

I am told that the mercury in some of the thermometers went to the top and bursted. If this hot spell had lasted another day I suppose we would not have had any bees left, and people, too, would have suffered, as it was all we could do to keep from suffocating. We had to be quiet and keep drinking and throwing water.

Last year we had a storm to damage us—this year the heat; still we are hopeful, and trust we shall never see such a hot day again. Our loss is great, but we hope to soon be in running shape again.

Very truly yours,
JENNIE ATCHLEY.

A Correction.—Mrs. Atchley, in answering Query No. 930, on page 16, meant to say that all queen-cells started before the old queen leaves the hive are equally good. Those started after she leaves may not be equally good. Please note this correction.

Bro. I. A. Travis, of Elkhorn, Wis., is in deep sorrow, his dear wife having died of la grippe terminating in heart failure a week or two ago. Surely, our brother and his family of four children will have the sincere sympathy of all bee-keepers in this time of their affliction and sadness. For nearly 23 years husband and wife walked together a-down life's pathway, midst all the joys as well as sorrows that came to them, but now the dear one has been called up higher, having fulfilled her mission as a faithful sister, true wife, and devoted mother. Only a little while, dear friends, and there will be a blessed re-union on the "other shore;" then "what a meeting and a greeting that will be!"

Mrs. Travis was a consistent member of the Methodist church. The obituary in the local newspaper says with sweet tenderness: "We shall miss her presence among us as with quietness of spirit and lovingness of heart she mingled with us in social life." That the sacred influence of her life may go out to bless others, and that her children may follow in her footsteps, is the hope that the BEE JOURNAL desires to express.

Uniting Bees.—One of Dr. Miller's recent "straws" in *Gleanings* was on uniting colonies, and reads thus:

For years I have had colonies unite, generally when I didn't want them to, by being in the same hive with a hole or crack under the division-board. Working on the same principle, here's the way I have united lately: Having the colonies to be united in two separate hives, I set one hive on top of the other, with a piece of heavy wrapping-paper between, the paper having about its center a hole large enough for a bee to go through. That's all. Just put one hive on the other, paper between. In a few days the paper is gnawed away, and the bees all one family. It may fail sometimes, but not thus far with me.

Wants or Exchanges.—On page 91 you will find a department begun again this week for the insertion of your "wants" or "exchanges." It will doubtless pay you to patronize that department, though of course we cannot hold ourselves responsible for any dissatisfaction that may arise from the trades that may be offered. But there is nothing wrong in fair exchanges, and often much benefit.

Petitioning for Foreign Bees.—We recently received the following communication from Ruth E. Taylor, of Bellona, N. Y., Secretary of the Ontario (N. Y.) County Bee-Keepers' Association:

At the last meeting of the Ontario County (N. Y.) Bee-Keepers' Association, the following resolutions were adopted:

WHEREAS, The United States Government has voted many thousands of dollars for the promotion of science and arts for the benefit of the few;

WHEREAS, The United States Government has voted many thousands of dollars for the promotion of agriculture, but has never voted a dollar for the promotion of apiculture, upon which rests much of the success of the agriculturist, horticulturist, and the prosperity of millions; therefore,

Resolved, That the bee-keepers of Ontario County, N. Y., in convention assembled, would respectfully ask and demand that

Congress vote a suitable appropriation, and employ competent parties to visit Judea and the East Indies, for the purpose of securing Apis Dorsata, and other races of bees not now domesticated, and their introduction into the United States; further,

Resolved, That a copy of these resolutions be published in the bee-papers, and that the bee-keepers of the United States be asked to join in petitions to Congress for the same purpose.

W. F. MARKS,
L. C. MATHER,
F. D. FRENCH,
Committee on Resolutions.

Comb Honey and Swarming.—On page 80 will be found an interesting article by Mr. T. I. Dugdale, of West Galway, N. Y., on "Comb Honey and the Prevention of Increase by Swarming." When sending it to us, Mr. D. enclosed the following:

Of course there is some work about my plan of managing swarms while working for comb honey, but the beauty of it is, it works, and comes nearer to Nature's way than any other I have ever tried. It is no mere theory on my part, but an actual practice case where I am working it on an apiary of 110 colonies, without a single failure thus far this season or last.

Yours truly, T. I. DUGDALE.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See another page for advertising offer.

Carniolans Great Breeders.—The June *Bee-Keepers' Review* had this editorial item by Bro. Hutchinson, on the Carniolan bees:

For several years I have had a few colonies of Carniolans. There is no question but that they are great breeders, especially so in the spring. I am not sure but this trait might not be used to advantage by Northern honey-producers in getting populous colonies in time for the white clover harvest. I do think, however, that this great brood-rearing disposition needs joining with the sense, or thrift, of the Italians. To illustrate:

I now have two colonies of pure Carniolans. They both swarmed June 2nd. I examined their hives and found every comb jammed full of brood, with not half a pound of honey in the hive. I also found another weak colony of Italians actually starving. No honey was coming in. The Carniolans will rear brood and swarm so long as there is a drop of honey in the hive, and it makes no difference if none is coming in. This may be a good trait in some respects, but it needs joining with some other traits.

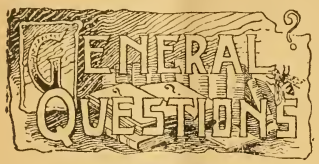
The Great Railroad Strike, at this time (July 13th), gives promise of being amicably settled very soon. While Chicago has been the "seat of war," neither the publishing of the BEE JOURNAL nor our mail have been noticeably interfered with. It has been suggested that we give something about the strike, in the BEE JOURNAL, but we hardly think it necessary, as the newspapers throughout the country have published full reports of the trouble, which is quite sufficient, we think. Nearly all trains, both freight and passenger, are now running on regular time on all the railroads centering in Chicago, and it is quite likely that in a week or two all will be going on again as usual.

☞ "It seems to me that I would have to go out of the bee-business should I drop the BEE JOURNAL. I find it very helpful to me."—B. F. Boultinghouse, of Indiana, June 30, 1894.

Continuous Advertising, even if it be only a small announcement, pays the advertiser the best in the long run. Spasmodic advertising, like "spasms" of any kind, is unsatisfactory. To secure the very best results, year in and year out, you must keep your name and business before the public. Only by so doing can you hope to keep from being forgotten when the time comes that your would-be customers wish to purchase what they want.

Besides, in the fall of the year, more agricultural papers send out large numbers of sample copies, and the advertiser fails to get the advantage of reaching the thousands who get the free sample copies, unless he keeps his advertisement running *all the time*. This is a matter worth thinking about. Heed the lesson taught by that intelligent comb foundation firm, Chas. Dadant & Son, and also others, whose advertisements are found in *every number* of the BEE JOURNAL without a single miss.

Have You Read the wonderful Premium offers on page 95?



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Making Foundation Moulds.

Please give full directions for making foundation moulds of plaster of paris; also full directions how to use them after they are made. S. D. Y.

Woodville, Tex.

ANSWER.—I don't know how the thing is done, and I doubt if you will care to know. I think those who have tried it have given it up. However, if any one makes a success of it, and thinks it a desirable thing, perhaps he will be kind enough to tell us about it through these pages.

Comb Honey Adulteration.

1. There is a man here who says that comb honey can be adulterated. Can it be done? If so, how?

2. Did you ever see, or hear of, any comb honey that was adulterated?

De Soto, Mo. A. B. G.

ANSWERS.—1. A silly story has been going the rounds of the press that artificial comb honey could be made, the combs made by man, the honey filled in and sealed over, without any help whatever from the bees. Sufficient reply to such nonsense is in the fact that for years A. I. Root has made a standing offer of $1,000 for a single pound of such honey, and no one has ever come forward to claim the $1,000.

Comb foundation is made and largely used, and in Germany they are now making combs with cells of full depth, but they are so heavy that they would at once be detected, and if everything else could be accomplished it hardly seems possible that any machinery could make even a faint imitation of the bees' handiwork in sealing the cells.

If sugar or some other substance were fed to bees and stored by them, that might be called adulterated comb honey.

2. I once saw a piece of artificial comb honey. It is the only piece I ever heard of, and was probably as nearly perfection as could be attained. But it was as easy to distinguish it from the dainty work of the bee as to distinguish a rose made of coarse cotton-cloth from the delicate flower that grows on the bush.

Queen-Cell Protector.

If a queen-cell just ready to hatch in a few hours or a day, is put in a West cell-protector, and put in the same apartment as the queen, and left so, what will be the result? J. F. L.

ANSWER.—The young queen may supplant the old one, but in most cases that I have tried, the young queen has been destroyed before she was three days old.

Pollen and Brood in Sections.

In many of my section cases 90 per cent. of the sections are completely peppered with a dark brown (almost black) pollen. In a few cases *drone-brood* was found in the lower half of one or more sections. How to explain this is the trouble. The queen was not crowded.

Some years ago I practiced contraction, often confining the queen on six frames and occasionally to five; and I can remember but one occasion of pollen in the sections, and then only to a very limited extent. I have also (years ago) used broad frames on each side, six brood-frames in the center; even then the queen never molested the sections, nor did they contain pollen.

I have never used zinc to any extent. When I use the T case I use a honey-board, either wood or zinc, as most convenient. When using a wood slatted-bottom case, bee-space below, I always omit the honey-board. I know of but one thing that may have favored the queen going above—it is this: Intelligent help not being obtainable, and being unable to examine the condition of the brood-chamber, as soon as the first colony cast a swarm (May 12th), I did not examine the strength of other colonies, nor did I wait for the whitening of the top of the frames, but proceeded to place 24 sections on each hive. White clover was in full bloom, but owing to

continuous rain with low temperature it yielded no nectar. The result was that the sections were unnoticed for more than two weeks, except for loafing.

One other possible, but to me improbable, factor: I had, last fall, about 400 partly-filled sections, mostly strong honey, which I fed to the bees. These were leveled, shaved down, and used freely as *baits*, putting from 8 to 12 in each case. The brood-chamber contains in no case less than 7 frames, generally 8, occasionally 9, sometimes 10—no system, but I aim to adapt to the strength of colony at the time. This season I could not examine and add a frame as needed, but at the time they were overhauled, some 75 or 80 empty combs were distributed among 40 colonies, partly to save them, and fearing I would not be able to give them as needed. The season opened well the first few days of May, then daily rains with low temperature, continuing until June 1st; not a pound of honey to the hive, and bees destroyed much brood.

White clover is still in full blast, but yielding sparely. I have had a rush only on two or three days; 30 of my 40 colonies have cast swarms. A dearth from drouth exists now. I have perhaps 600 pounds, possibly 700, almost ready to cap. A good rain with electrical accompaniment is with us to-night, which insures a return of the flow.

Now, the whole thing is this:

1. What am I to do with this "*pollenated*" honey? Some sections are horrible—the lower half being thickly peppered. It can't be sold, it won't keep, or might be kept and fed back this fall—cut out the comb and burn the wood, or, if I had an extractor, I might extract; then the honey would be badly tainted, and would not sell except for use in the arts.

Right here allow me to say that I have an enviable reputation for producing gilt-edge comb honey. So I am jealous of impure honey.

2. What is the cause of this anomaly, and how can I prevent its repetition?

Guy's, Md., June 25. W. S. A.

ANSWERS.—1. I never knew the time when honey to feed in the spring was not a valuable thing, and, all the better, honey with pollen. You say, "It won't keep," but I'm sure I don't know why. Are you not mistaken in that? It could be fed and then the combs melted up; or, if after the honey was fed out, the sections were left where all the bees of the apiary had free access to them, it is possible the pollen might be cleaned out. Certainly I wouldn't spoil my market by selling it, although it might do to sell to neighbors at a low price, with a distinct nnderstanding that it was an inferior article. If you could get the bees to clean out the pollen without darkening the combs, they might be used over again.

2. I'm sorry to say I can't give a bit of light on the second question. If any of the correspondents of the BEE JOURNAL can do so, I hope they will. Putting on the sections before needed I feel pretty sure has nothing to do with the case. I've done that often with no such results. The drone-brood in small quantity is nothing so very strange. Your brood-combs probably had few or no drone-cells, and the anxiety for drone-brood made the bees fill out the sections with drone-comb, and then the queen explored till she found these.

I should think it just possible that the presence of drone-brood, or indeed of any brood, in the sections, might induce the bees to put pollen there, but as I understand you, some of the cases had no brood in.

Drone-brood in sections can be prevented by filling the sections with worker foundation, but worker foundation will not keep pollen out.

I don't think the use of bait sections had anything to do with the trouble. Who can help us out?

Sweet Clover and Lucerne.

1. How would I manage to get one patch to yield nectar from sweet clover every year? Or can't it be done?

2. Will lucerne clover bloom the first year? At what time does it begin to blossom? M. W. G.

Bankston, Ala.

ANSWERS.—1. Sweet clover comes from the seed one year, makes a small growth, then makes a big growth its second or blooming year, then dies root and branch. To get a patch to bloom, therefore, every year, it will be necessary to sow two years in succession. In the fall or early spring you can get the second sowing in by scattering on the surface of the ground, then letting horses or cattle tread in the seed.

2. I don't know, but I am under the impression that it does not bloom till the second year. July is given in the botany as its time of blooming, but in Colorado they claim from June till September.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Honey and Bees as Remedies.

Of all commendable enterprises, I think the care of a few colonies of bees the most pleasant, instructive and profitable. What wisdom may be gathered from close observation of their native tact and industry!—and what luscious sweets may be ours through their perseverance and our efforts! Just think of biscuits and honey! How one's mouth fairly waters at the very suggestion! The most perfect, most healthful sweet extant—far better than candies! And such a desirable vehicle for many remedies.

Now we all admit that borax is not nice to the taste, and Charlie will yell if you insist on his taking it; but just mix a little of the powder with a tea-spoonful of honey, and lo! he wants some more, right away. And you know this mixture is excellent for ordinary sore throats and tickling coughs. Yes, and for cankered sore mouth (the result of indigestion).

Then, too, when Lucy has a fever—mouth parched, tongue dry as a shingle, skin shrivelled, and hands hot—why, that's the time when water and honey, with a dash of lemon juice in it, will make the child smile with delight.

If you *have* to give castor oil—the nasty stuff—mix half oil and half honey, and the bees themselves would hardly recognize the horrible adulteration! Fred will take it right down with a smack of his lips!

For Mary's whooping cough, a sprinkle of pulverized alum on a table-spoonful of honey every hour or two will greatly help.

Did you ever try boneset tea and honey, equal parts, for that tired, shiftless feeling experienced principally in the fall, generally attributed to "biliousness? Well, it is really a fine tonic—a real "bracer" to human energies. A cup of the mixture taken hot, night and morning for a few days, is certainly very effective.

Then, too, honey with equal parts of common soap makes a drawing plaster for boils, felons and sores that is tremendously effective. Then for scalds and burns, honey and baking soda, equal parts, well spread on, is a very cooling and healing application.

Then come the bees themselves—their stings are a very blessing to many who suffer from sciatic rheumatism, and old people afflicted with irritation of the bladder, and all its attendant discomforts, are greatly benefited by bee-stings. A few can be extracted from the bees and taken each morning and night; or let them sting you. The pain resulting is slight compared with the intolerance of the trouble.

Some authorities assert that the daily use of honey is an infallible preventive of gravel or stone in the bladder, by those predisposed to this affliction. Also such as have had, or may have, calculi in the kidneys, or in the gall-bladder—but of this I cannot state from personal observation. However, the remedy is certainly pleasant and well worth trying.

Yes, and do you know that for swollen, dropsical limbs, where even the toes are puffed and stiff, that if you let a bee sting the swollen parts a few times it will greatly relieve and sometimes entirely cure? "Ouch!"—no, you needn't fear, you'll hardly feel the sting. Just try it and report. It ought to be done every other day.

But I must stop right here, much as I dislike to do so, because so much can be said of the usefulness of bees and honey, but I fear my readers will think I'm an apiarist trying to sell colonies! But I'm not.

The Young Mother.

There is so much that young mothers should know in regard to the "before and after" that I would feel a personal responsibility for their safety did I not attempt to at least suggest ways and means by which the best interest of mother and child can be subserved.

A daily bath—first tepid, then cold water as can be comfortably borne, followed by brisk rubbing with a rough towel until the skin is in fine glow, is one of the most delightful sanitary measures, and must not be omitted. After it, full breathing exercise, lying flat on your back, on bed or lounge, taking full, deep inspirations for, say 10 minutes, then a comfortable walk of half an hour or more, after which general household duties can be engaged in.

The diet should consist largely of fruits and vegetables, little or no meat, coffee or tea; chocolate, milk or water instead.

Now, little woman, if you will follow

these directions you will feel amply repaid by the easy, natural confinement, healthy baby and pleasant recovery you will have. But don't be too smart and show how quickly you can "get up"—rather be a type of intelligent patience, and rest easily for a couple weeks before resuming oversight of your home. You will then be free of the usual backache and headache, and general lassitude of the "smarter" but less wise mamma who wishes to be considered more vigorous than her sisters.

Oh, it is these aches and pains that wear the spirit of the young mother, and patience of her attendants! How *can* a mother do justice to her helpless infant when she herself is so tortured! The evil is only intensified by the reflection that by reasonable, judicious rest after labor, all these discouraging results might have been entirely obviated!

Rhus Poisoning.

"As I live, it's erysiply! Why, who'd thought it in a boy so young?"

"Well, Mrs. Jones, I don't know. Had'nt we better send for the Doctor?"

"Mebby."

"Well, well, Tommy, how swelled up you are! Where have you been—what have you been doing?"

"Nothin'."

"O yes, you have, my boy. Come, tell me, that's a good boy. You don't need any medicine;" (at which announcement the boy at once becomes communicative, and admits his effort to borrow from his neighbor's apple orchard).

By this time his face was puffed red, smarting vigorously, and eyes nearly closed. With a view to teaching the boy a lesson in case of accidents, I directed him to get the baking soda, and mixing a tablespoonful with enough water and flour to make it the consistency of thick cream, I showed him how to apply it over all the "welts" he had—on face and body, and then lie down and keep *still*. This application soon relieved the smarting and swelling, and by next day it was much better, and in a few days entirely recovered of what was supposed was erysipelas, but in reality only poison-oak (Rhus) poisoning. Some persons are exceedingly sensitive to the pollen of this plant—others can roll in it with impunity.

Great Premiums on page 92!

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

The Season in Texas So Far.

As 50 or more have asked me to keep close watch of this locality this year, and report, I will say that it has been all heart could wish as far as honey is concerned. We had a good honey-flow in April, one in May, and one in June, and it still continues.

Don't ask me what land is worth—we have taken real estate out of "In Sunny Southland." But, all of this country is free for bee-keeping. You do not need to own land. I will give all the principal honey-plants, quality of honey, and all the information I can before this year runs out; so if you wish to learn all about bees in this locality, also the flowers, watch "In Sunny Southland." This is what this department is for—to keep you informed on the South. I am getting reports from nearly all sections of the South, which will appear later on.

JENNIE ATCHLEY.

Something About Criticisms.

I have been noticing for some weeks back in the "Old Reliable," some friendly criticisms, and I think we all need such occasionally, or I think *I* do, at least. I have been so *very* busy that I could not well take time to offer a reply, and I thought sometimes may be it might be best for me to keep silent, as I might get into trouble. Then comes Mr. Hutchinson, in the *Review*, and says it is criminal to remain silent, or something like that.

Mister Somebody (I have forgotten who, but I'm sure he's a friend, though) thinks I ought to stop calling people "Friend" So-and-So. Now, look here *Mister*, if you wish to see or hear of Jennie Atchley laying down her pen and pencil forever in behalf of the public, just get all bee-keepers to say this, and

down she goes. I take everybody to be my friend who corresponds with me, or has dealings with me in any way. Then why call people nick-names?

There are only two things that every person can be towards me or any other person—these two things are—you are either my friend or my foe. Then, if you are my foe, do I expect you to do business with me? No. Then you are my friend, and I have a right to call you such. You are *for* me or *against* me.

Then, again, I have before me a little book that lies on my table most of the time, and this little book I take as my guide through life. It is the Bible (a small one), and I have read and re-read its pages, and I can't find "Mister" in it. I do not find Mister Christ, Mister John, Mister Abraham, etc. Then, as I do not find it in my guide-book, I do not care to pick it up outside, to use in a general way. I do not object to the word, particularly, and *must* admit that it comes in nice in speaking of nobles or strangers, sometimes. But Mister is only a picked-up word, or what we sometimes call a "by-word."

I wish right here to relate a little incident in life where I used to hear the word "Mister," and it sounds to me spiteful to this day. It was at the forks of the road, that I used to walk through the woods to school three miles, when a girl. Well, at the forks of this road, which was about half way home, a good portion of the school parted, and right at that spot I have often seen and heard little childish rows—such as school children used to have about little, trifling matters, just such as we are now having about Mister; and that word still rings in my ears to-day, when I think about it, as the offended ones parted and said, "Never mind, *Mister!* I'll tell the teacher on you in the morning!"

Now, do you see the proper place for Mister, in a common way? Never did I hear, "Never mind, my friend," etc.

Ah, my friends, let us quit being stuck up, and let the people all know who read our bee-papers, that we are *friends;* and whenever a bee-keeper does not wish me to call him or her "Friend," I will always say Mr. or Mrs., if they will let me know it.

Why, I have read somewhere, that our noble George Washington would rather be called "George" than "Mr. Washington." I have noticed lately that Rev. W. F. Clarke and Dr. Miller have been wrestling over something of the same nature. Friends, let's stop this business in print. Where are we drifting? If you are Bill Jones, and somebody writes about you and calls you Bill Jones, for the sake of good people, laugh about it, and in a good, old, friendly way call him Dan Smith back, if that's his name.

I love good company and good society, but when I see some one trying to be too polite to be comfortable in society, then I feel tired. (By the grace of *God* I am what I am.) JENNIE ATCHLEY.

Another Fine Bee County.

MRS. ATCHLEY:—I have taken five tons of honey from 50 colonies so far, and expect more. J. B. CASE.

Port Orange, Fla., June 25.

Bro. Case, let us feel proud of our Southern homes. Some bees here have gathered more than 200 pounds, to date, of fine honey per colony, and four months yet to work in. Good for Sunny Southland! JENNIE ATCHLEY.

Random Paragraphs.

We have had a steady honey-flow since April 1st, and still it comes.

Did you notice how bright *Gleanings* shines lately? *Gleanings* has always been good, but it seems to be getting better all the time.

We would like to have bee-keepers enough here to produce ten carloads of honey next year, that has gone to waste this year, just for want of bees and people to take care of it.

There is no rose without its thorns. I do believe there are more ants here than any place I ever saw. We are obliged to keep our honey in almost air-tight vessels to keep them out. Then we have what is termed here the "third party flea." These fleas come about the time the third party started out, hence they are termed third party fleas, and they do bite, sometimes. But, all in all, we have a pleasant country.

Now, Dr. Miller, you have upset my work again. It just looks as if you are not satisfied unless you are opposing somebody. Now, you ought to know that our bees in the South cap their honey sooner after the nearly full super is raised on top of an empty one. Yes, Doctor, I think the bees down here do seal up the top tier of sections a heap

quicker, if the colony is good and strong, and honey is coming in fast. I'll get even with you in some way!

JENNIE ATCHLEY.

Invitation.

I have entered at last the County of Bee,
Remote but not far from the branch of the sea,
The great and long-traversed Gulf of Mexico,
Into which mighty rivers incessantly flow.

The climate is fine,
The soil superfine,
The ladies are charming,
And almost divine;
And the musical bees,
And the shady oak trees,
Invite you and me
To the County of Bee.

Though distant, remote from the homes of the men,
Who secured for us all with the sword and the pen,
The freedom to go where, and live where we please,
Come, come to the County of Bee and the bees;

Whose skies are auspicious,
Whose fruits are delicious,
Whose ladies are lovely,
Whose men are ambitious.
Thy future is grand,
Thy prairies are fanned
By gales from the sea,
O County of Bee!

Do not of the author of this impromptu sonnet
Say winking, "He has a bee in his bonnet;"
He does not imagine any more than is due,
To the county that humming and buzzing greets you.

And the exquisite flowers,
That sweeten its hours,
And the ladies that cheer
All dull days of ours;
And the birds, and the bees,
And the shady oak trees,
Invite you and me
To the County of Bee.

Bee County, Tex. R. S. FOSTER.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

Bleaching Comb Honey.

Query 932.—1. Can comb honey be bleached by any method, without impairing its flavor?

2. If so, what is the method?—Colo.

1. No.—J. H. LARRABEE.

1. I think not.—M. MAHIN.

1. I think not.—S. I. FREEBORN.

1. Not that I know of.—J. E. POND.

1. Not that I know of.—C. C. MILLER.

1. I do not know.—MRS. L. HARRISON.

1. None that I know of.—G. L. TINKER.

1. I don't know of any.—H. D. CUTTING.

1. Not that I know of.—P. H. ELWOOD.

1. Yes. 2. In the sun.—JAS. A. STONE.

1 and 2. I don't know.—MRS. JENNIE ATCHLEY.

1. I do not know of any method.—J. P. H. BROWN.

1. By none that I am acquainted with.—EUGENE SECOR.

1. I think not. At least I know of none.—A. J. COOK.

1 and 2. It bleaches by being exposed to the light.—E. FRANCE.

1. I don't know. What do you wish to bleach it for?—G. M. DOOLITTLE.

1 and 2. Let the sun bleach and ripen it in a warm, dry room.—W. M. BARNUM.

1. I think it is very doubtful. 2. I don't know. Do you?—J. M. HAMBAUGH.

1. I do not think anything practical can be done in this direction.—J. A. GREEN.

1. I never before heard of "bleaching" honey. I don't think I understand the question.—R. L. TAYLOR.

1 and 2. I know of no way of *bleaching;* but by putting honey in a dry, warm room, where it will not freeze, as

the nectar thickens it will recede from the cappings, and the farther away the caps are from the honey, the whiter will be the appearance.—Mrs. J. N. Heater.

I think there is no way of bleaching comb honey. But why bleach it? Better sell it for just what it is.—C. H. Dibbern.

1 and 2. I do not know of any. Why should one spend his time in such unprofitable work, anyway?—Emerson T. Abbott.

We wish some one would invent a method to bleach honey-dew, for it would sell well if it were not for the color.—Dadant & Son.

1. It cannot be done. Light-colored honey, if the bee-keeper knows his business, will always be finished up white, or fine cream tinted, and needs no bleaching; while if the honey is dark or reddish in color, very white capping exaggerates it.—G. W. Demaree.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Aug. 1.—Central California, at Hanford, Calif. J. F. Flory, Sec., Lemoore, Calif.

Aug. 16.—East Tennessee, at Whitesburg, Tenn. H. F. Coleman, Sec., Sneedville, Tenn.

Oct. 16-18.—North American, St. Joseph, Mo. Frank Benton, Sec., Washington, D. C.

Sept. 11-13.—Nebraska State, at Lincoln. L. D. Stilson, Sec., York, Nebr.

Sept. 15.—S. E. Kansas, at Bronson, Kan. J. C. Balch, Sec., Bronson, Kans.

1895.

Jan. 28.—Venango Co., at Franklin, Pa. C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.

☞ **In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—The Editor.**

North American Bee-Keepers' Association

Pres.—Emerson T. Abbott....St. Joseph, Mo.
Vice-Pres.—O. L. Hershiser....Buffalo, N. Y.
Secretary—Frank Benton, Washington, D. C.
Treasurer—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

President—Hon. R. L. Taylor..Lapeer, Mich.
Gen'l Manager—T. G. Newman, Chicago, Ill. 147 South Western Avenue.

Read our great offers on page 94.

Managing Bees.

Comb Honey and Prevention of Increase by Swarming.

Written for the American Bee Journal

BY T. I. DUGDALE.

As a producer of comb honey, I have been asked to write for publication a description of the way I manage my bees to secure a honey crop without increasing the original number of colonies.

Before giving the plan in detail, I will say that although I do not remember ever having seen it in print, still it may not be entirely new to some; and I will say further, that it was not the absolute prevention of swarming I had in view when I began to experiment along this line some years ago, but to know what to do to accomplish the best results when the bees did swarm, which they are almost sure to do sooner or later regardless of all that has been said and done thus far to prevent it.

Neither do I find that bees of any particular race or color—be it black, yellow or grey—are entirely exempt from swarming, when the colonies are sufficiently strong in numbers, and the honey-flow abundant. It is their natural way of increase, has been so from the beginning of time, and I never expect to see it overcome in my day; so, after much thought and experiment along the line of prevention, with but little prospect of success, I turned my labors to the other side of the question, and set about devising a course to pursue when swarming did occur.

But bearing in mind that it is honey I am after, and not increase, of course I employ all known rules which tend to prevent it—such as giving abundant room in the sections, which should at least be supplied with starters of foundation, and at the commencement of the season, if a few sections filled with clean, empty comb can be placed in the

center of the crate or super, so much the better; this, with room for the queen to lay in the brood-chamber, ample entrance for ventilation, together with shade, etc.—these, and perhaps other minor details, may be of some service in securing the end desired.

After observing all these precautions, and perhaps getting the bees nicely started at work in the sections, how provoking to see them drop work and send out a rousing big swarm! It has been recommended under such circumstances to open the hive, remove all queen-cells, and return the swarm to the parent colony; but after thoroughly testing this plan, I find that in very few cases does it amount to anything so far as securing honey is concerned, than to have allowed the swarm to have gone to the woods, and have done with it at once, provided the queen, should she be a valuable one, could be saved, as it is usually only a question of from a few hours to a few days when they will again pour out, and while they do stay in they only sulk and accomplish nothing, and, if the above plan is repeated several times, are almost sure to kill the old queen, and again come out with a young one; and even if one does succeed in getting them to remain at home, the colony usually does but little work until a new force of bees hatch and become old enough to carry on the labors of the hive. By this time the harvest is usually over, the season drawing to a close, and but little honey to reward the owner for the promising outlook at the beginning of the season.

Now I want to say that the plan which I am about to give is not patented, neither is it necessary to buy a cent's worth of *traps or fixin's* to put it into successful operation, provided, of course, you have an empty hive and a few extra frames on hand.

To begin with, then, let us suppose that the reader has the bees in the dovetailed hive, or any other style which is capable of being tiered up. They are to be supplied with sections at the beginning of the honey-flow, or sooney if they are strong enough to occupy them. In case the colony should, in due time, cast a swarm first, secure the old queen, which can be accomplished either by having one wing clipped so she cannot fly, or by using a trap on the entrance to the hive. Next, while the swarm is in the air, remove the old brood-chamber, combs and all, from the stand, and replace it with another filled with empty combs, full sheets of foundation, or starters, as you choose, or whichever you are best supplied with. Now remove the crate of sections from the old hive, and put them in place on the new one, on the old stand, and if the cover to the hive is a flat one, put it on also.

By this time, the bees will in many cases have missed their queen, and without clustering will be returning home. Allow them to enter the hive prepared for them, and if the queen has been caged release her (provided her wing is clipped); but if she is caught in a queen-trap without being clipped, adjust the trap to the new hive, then release the queen, leaving the trap in place until satisfied that the colony has commenced work in earnest, otherwise they might desert and leave for parts unknown.

Then take the hive containing the old combs of brood and honey, together with the bees which were left behind, and set it on top of the new hive, thus making the top of the new hive serve as a bottom for the old one; put a cover on this, and give them an entrance at one end, and the work for the present is done.

Next, keep a record of the date on which this colony swarmed, and if you wish to rear some queens, and the cells left in the old colony are from choice stock, here is your chance. Bore a one-inch hole in each side of the top hive for an entrance, divide the colony into three parts, giving say two combs of brood and honey and one queen-cell to each—this will probably leave sufficient room to insert the extra division-boards required to keep each one of these lots of bees separate.

We now have three nucleus colonies, which in due time should furnish a laying queen each (barring accident, of course). I usually divide up the old colony in from four to five days after the swarm issues, as they sometimes "hang fire;" that is, they do not, on account of bad weather or other causes, come out as soon as the first cell is capped, hence if we wait until the seventh or eighth day, we may get either a second swarm or lose all our queen-cells by their being torn open by the first young queen that hatches. With this plan I find that this latter is the most apt to happen, as but few old field-bees remain in the old hive, so there is but little honey coming in, which is as we want it at this time.

If your hive is not large enough to contain all the combs of the old colony with the added division-boards, remove a frame or two and add them to some other colony, if they contain brood.

If you do not wish to rear any queens,

destroy all the queen-cells in the old colony, allowing none to hatch, and when the swarm has become fairly established in the new hive (which they will usually do in four or five days, and be working like beavers), the brood in the old hive may be used to build up weak colonies, if one should have any, or, in case they are not needed for that purpose, and the swarm was hived on only starters, they may be replaced in the under hive, bees and all, and the frames containing starters removed and saved for the next swarm.

By this time, if honey has been coming in freely, a good start will usually have been made in the sections, which will in most cases now be carried on till completed.

Yet another way is to allow no queen to hatch in the old hive, and allow it to remain until all brood hatches, which will be in about three weeks, and having placed a queen-excluding honey-board between the two hives, which will allow the bees to unite, we extract all honey from the combs, leaving them empty for future use. I would only recommend this latter plan where empty combs or full sheets of foundation are used to hive the swarm on, as there is often too much drone-comb built to be allowed to remain in the hive where starters only are used and the bees allowed to build their own combs.

The above plan will give fine results if carried out carefully, and I have endeavored to make it so plain that none need to meet with a failure, it would seem to me, and any intelligent person will at once see that it is capable of so many modifications as to be available in almost any emergency that may arise during the swarming season, and only requiring the outlay for a few extra hive-bodies and extra frames for the same, while a few extra combs are always good property for a bee-keeper to have on hand.

I hope that some of the clan who have tried other methods only to be disappointed, will give this a trial, and I fear not but what they will be pleased with it, as it keeps the working force of bees just where we want them, and does away with after-swarms entirely, while we retain the energy and vim usually shown by a new swarm.

West Galway, N. Y., July 5.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

A Characteristic of Good Queens.

Written for the American Bee Journal

BY DR. G. L. TINKER.

At least one of the points in a valuable queen may be determined by her form of development, and as everything bearing upon the rearing of good queens should be known, I will give one that I have not heretofore seen any notice of in our bee-papers.

Queen-breeders especially, should know what development in a queen will give the greatest strength and activity to her workers, since there is as much or more in having strong and energetic bees as there is in any other one thing. We may have ever so good a honey-flow, and the best of management, and with weak flying, lazy bees we will fail of a good crop.

Mr. Henry Alley well says that some strains of bees are "constitutionally weak," and I fully agree with him. Now the question arises, if this is so, how are we to tell that a given colony of bees are weak and inferior?

With man and all animals a large, deep and well-developed chest or thorax is evidence, first, of good vitality, and secondly, of great strength and endurance. But on examination of worker-bees by the unaided eye, to determine this point is impossible so far as I am able to judge. In the size of the thorax of the queen, however, the practiced eye can readily detect a great difference. For some strains of queens, no matter how well they may be reared, have relatively small chests, while other strains are characterized by large, well-developed chests.

Now I have observed that the bees of a colony having a small-chested queen are not good workers, and especially are they weak upon the wing. They gather comparatively little honey, and are practically worthless.

Strong-flying bees may be known by their flight on the cool days of spring. Few, if any, will be found chilled and lying upon the ground in front of the hive, while the workers of a weak queen will be found lying thick all about the entrance, and they rarely take wing again.

If I were to be asked what is the best single point in a good queen-bee, the answer would be—"a large, well-developed thorax." And the reason is plain—the muscles moving the wings are all located in the chest, and the larger the

chest, the larger must be these muscles, and the stronger the wing-power of every worker-bee reared from such queens, since the worker-bee in general form of development invariably takes after the queen-mother.

New Philadelphia, Ohio.

Bees in Kentucky—Other Matters.

Written for the American Bee Journal

BY G. W. DEMAREE.

After so much discouraging weather, the present month (June), came in more favorable to our bees. The white clover crop, our only chance for surplus honey, is far below the average in quantity, but it seems to be rich with the precious sweets, and our bees are gathering a surplus, but the weather now (June 23rd) is too hot for the best results in honey gathering. For the past three or four days the temperature has reached from 94° to 98° in the shade, in the heat of the day, and the bees have clustered badly on the outsides of the hives. I have often noticed that very hot weather is unfavorable to a liberal flow of nectar.

The honey harvest will be too short here, to give us more than a very light crop of honey taken with the honey extractor. There will be less comb honey here this season than in any season of the past, as far as I can remember, and the crop must be short all around. This is unfortunate in a year of scarcity of fruits of all kinds. I hate to have to do it, but I shall have to raise the price on my honey this season, to help out the short yield, eh?

THE PERFORATED QUEEN-EXCLUDER.

The general use of the perforated queen-excluder only awaits a more thorough knowledge of its advantages and possibilities. With the use of this valuable help in apiary manipulation, all the elements must be against the production of honey, if I fail to get some honey, taken with the extractor.

If the queen was permitted to follow her instincts, and invade with her domestic affairs, the surplus departments of the hives in a slow season like this, there would really be but little honey in hape to be taken with the extractor.

In fact, with the queen-excluder, swarming is controlled completely in my apiary by raising the sealed brood above the excluder. In some cases only a few of the frames of brood removed from the breeding department, and empty combs put in their places, will check the inclination to swarm. In other cases, after the swarming impulse has taken hold of the bees, nearly the whole of the brood must be raised above the excluder to cure the swarming fever. We sometimes handle combs that contain brood when extracting, but we have this advantage—they contain no unsealed brood. But as a general rule, having plenty of surplus combs to "tier up," as fast as the bees may need the room, we do not take the honey until all the young bees are hatched out, and the combs are well filled (and sealed) with honey.

CLOSE-FITTING FRAMES AGAIN.

Self-interest, I presume, on the part of some of our friends, will keep up the interest in behalf of the worst of misconceptions—"close-fitting frames."

A few weeks ago I transferred a colony of bees from one of these close-fitting frame hives, and it was full of ant-nests at the *close ends*, and the frames were so "stuck up" that I had to pry the frames apart to get them out.

At the same time I transferred several colonies from Langstroth hives, that had badly built combs, and in every case I found the bee-spaces all opened, and the inside of the hives sweet and clean. What a practical lesson is this! The longer I work with hives and bees, the more thoroughly I am convinced that the common hanging frame gives the minimum of labor and vexation.

When it becomes necessary to make the frames stationary, in case of moving hives some distance, a very simple device can be used to hold the frames temporarily until its use is no longer needed.

QUALITY OF HONEY.

I would be pleased if Mr. McKnight would repeat for himself *my experiments* referred to by him on page 818, viz.: Select combs from one-third to half sealed; first extract the thin unsealed nectar, and put it by itself; then uncap and extract the sealed parts of the combs, and store it by itself, and treat the two divisions in the usual way, and keep them for observation. With Mr. McKnight's intelligence, he will not fail to see that the mere *expulsion of the surplus water in* the nectar is not all that there is in the process of so-called "ripening of honey."

To get genuine virgin honey it must be evaporated in the warm, sweet, formic-acid, disinfected current of air, that is found nowhere else but in the

bee-hives. But nobody knows better than a lawyer how hard it is to decide a matter against one's own interest, or *apparent* interest. It is much cheaper to extract the honey when thin and unsealed, and this consideration weighs heavily to the short-sighted. This short-sighted "evaporated honey" business will ultimately bring the price of honey taken with the extractor down to glucose prices.

DARWIN AND BEES.

That paragraph concerning Darwin and bees, which plays a part in that little review of mine published on page 593, seems to have stirred up some of my good friends, as it has brought me some friendly expostulations, and now my friend, Allen Pringle, of Canada, asks me to "particularize"—perhaps make some apology! The paragraph, it seems to me, is clear enough to be understood. In itself it was merely incidental, falling in line with the subjects reviewed in my article.

Darwin wrote learnedly and exhaustively about many things that he, nor no one else, could demonstrate, but when he wrote of bees—matters which can be practically demonstrated—he blundered like other mortals! I could not enter into "particulars," for this would open up a discussion foreign to the specialty of this journal, and the Editor, friendly as he is, would stop me.

Judging by the earnest but friendly letters I have received since writing that offending paragraph, together with the concern manifested by Mr. Pringle, our friends are *jealous* of the reputation of Darwin! What has Dr. Darwin done for this world, that he is watched over with such tender care? He has unsettled the faith of some, and set them adrift in the "mazes lost." But he has not lifted up a single fallen mortal, nor taken the strain off of a breaking heart, nor hushed a convulsing sob, or dried a burning tear, in all this world of woes, which (the whole creation) "groans and travails in pain to be delivered." Some of us look for a better "age" than this, and we know that it will never be "built up from the dust."

Our friends *trust* Darwin! We look for the Lord from the Heavens. But we are the enemies of nothing in this world except the sins peculiar to mankind, and "which beset us."

I think, under the circumstances, this much ought to be written in any publication; and what is said here, needs no answer, and no reply.

Christiansburg, Ky.

[We think Bro. Demaree is quite right, in hinting that an investigation of the theories of Darwin as to bees, would "open up a discussion foreign to the specialty" of the BEE JOURNAL. Of course, all will admit that Darwin was a great student of Nature, but it must be remembered that he was also *human*, and liable to err as do all men. The published results of his researches are open to all, and by his writings it can be judged whether or not his theories about bees were correct. All who are interested can procure those published works, read them, and then decide for themselves.—EDITOR.]

An Experience with Bee-Paralysis.

Written for the American Bee Journal

BY W. A. THOMPSON.

In the BEE JOURNAL of June 14th I am quoted as recommending "changing the queen" as a cure for bee-paralysis; also mentioned as an "experienced apiarist." Well, I suppose "experienced," like "good," is a relative word.

In the spring of 1893 one colony of my bees had a bad attack of bee-paralysis. The bees were in a new dovetailed hive resting on four bricks, giving a free circulation of air underneath the hive. It was one of the strongest colonies I had, and all the eight frames were well filled with brood, but very little honey in the frames. The bottom-board in front of the hive was covered night and day with the bees trying to get rid of the sick bees, that were ravenously hungry, although their shiny, black abdomens were distended almost to bursting.

As the field-bees came in, the sick bees would meet them and beg for food. On the ground in front of the hive was a mass of dead and dying bees about 15 inches in diameter, and perhaps two inches deep. If the other colonies got the same disease, good-bye to any honey.

I made up my mind to study the disease a little, and see if I could get the best of it. First, going through my bee-books, I found Mr. Heddon claimed that the cause was in the queen, and recommended changing the queen. I had a fine young queen in a two-frame nucleus, and after killing the queen of

the diseased hive, I took out two frames from one side and replaced them with the frames from the nucleus—bees, queen and all—placing the queen against the side of the hive.

I found that the sick bees driven away from their own hive, were trying to enter the hives nearest, and were begging food of any field-bees that fell on the ground as they came in laden with honey, and that the field-bees would stop and feed them, no matter what hive the field-bees belonged to. If the disease was contagious, here was an easy way to carry it from one hive to another. The question came up, How can I prevent the sick bees from getting into other hives, or coming in contact with the field-bees of other hives?

After thinking the matter over, I concluded to put the diseased hive, and the other hives within 15 feet, on top of barrels, and under the front of the diseased hive place something to catch the bees as they were pushed off the bottom-board in front of the hive.

First cleaning away the dead and dying bees from the front of the hive and burning them up, I placed the hive on a barrel, and put on the ground in front of the hive an iron pan about three feet square, and with sides about three inches deep. The quivering motion of the sick bees' wings enabled them to crawl rapidly over the surface, but they could not get over the raised sides. Every morning I went out and burned up the bees in the pan, generally finding from one-half a pint to a pint of bees.

The bees in the diseased hive were one-fourth Italians, with no light bands. The new queen was a pure Italian. In five weeks from the time I put her in, all the old bees had disappeared, and so had the disease. Although it was late in the honey season, I got over 30 sections from that colony. The disease did not spread to any other hive.

Since then I met an apiarist from the enter of the State. He told me his hives were on a side hill; that one of the hives in the top row got the disease, and it spread down the hill through his apiary, and he lost a great many colonies of bees.

To sum up: Raise the diseased hive and others around it about three feet from the ground; place under the alighting-board of the diseased hive something that will catch the sick bees, and burn them up every day. Change the queen, and feed liberally to help her to replace the dead bees as fast as possible with healthy brood. I think the burning of the dead bees a very essential part of the treatment. Will some bee-keeper try the method in full—not half of it—and report results?

Asheville, N. C., June 18.

Bees and Honey-Plants in Utah.

Written for the American Bee Journal

BY E. S. LOVESY.

Among other questions of late, I have had many inquiries on the matters indicated by the subject of this article. As I have before stated, lucerne, sweet clover, and Rocky Mountain bee-plant are some of the principal honey-plants here. We also have sweet willow, locust, fruit-bloom, and others. The lucerne has been in bloom here since the first of this month; further south, it is earlier. The sweet clover comes in early in July, generally remaining in bloom more or less for about three months. The Rocky Mountain bee-plant is a fall plant.

The bees do not always work on the lucerne to the extent that they are doing now, for in many localities they are booming. I have several colonies now with over 100 pounds of new honey in their hives, gathered principally from lucerne, and some of them are colonies that I have divided, and I have also taken some brood from them to build up weak ones. While some of those weak ones are building up now, I do not know if it will pay me or not. The reason I have them with me, is that on the morning of the first of May one of my neighbors had a large frame barn burned down, and my bees were burnt with it, leaving a few bees in about one-third of the hives. While I felt badly to lose them, I feel worse to have them destroyed by fire, and just at a time that the honey harvest is commencing.

In this connection, allow me to ask a question—Is there such a thing as luck? Does everything go by chance? For four years we fought the ants until we got the best of them by a method published in the BEE JOURNAL last September. Then two years ago last winter we lost the most of our bees by the long, hard winter, and now a poor, miserable fire-bug, through his enmity to some one else, applies the torch to us! But I am drifting from the subject of honey-plants.

While the bees are working well on the lucerne now, they sometimes work more on the sweet clover at the time that the second and third crop of lu-

cerne is in bloom. Then, besides its virtue as a honey-plant, for a forage plant lucerne is by far the most valuable of anything that grows in this country. While we do not pretend to affirm what this plant would do in all parts of the country, we are positive it will do well any place south of Utah, especially where it is moderately dry and warm. I think it will grow all right in many parts of the East and West, unless the climate is very wet. But we find the real trouble is, in a large portion of the West and Southwest, the climate is not wet enough. It looks to me that if Western Nebraska, Kansas, and portions of Texas could adopt a system of irrigation, it would be of vast benefit to them. It would have a tendency to change the climate in those places, and by planting trees after awhile they could possibly have artesian wells where there is no water now. Conditions have changed to that extent in some places here.

Utah was less than half a century ago a dry, barren, and forbidden waste, left to the deer, the wolf and the bear, and a few poor Indians who lived by hunting the animals that I have named. Utah was called the "Great American Desert," and it was supposed to be an utter impossibility to grow or produce any vegetable life. When the first company of Utah pioneers passed through what is now known as the State of Wyoming, in 1847, James Bridger and others told them that they were going out on a desert to starve. He told them that he would give them $100 for the first ear of corn that they could raise.

Contrast this with what we behold now. The roses are in bloom, and the earth is covered with trees, green fields and fruits, and the little busy bees are making things hum as they rush to and fro to gather the sweets from the many flowers. Thus we see that what was once the "Great Desert," is now full of life and animation; and this system of irrigation has been the main-spring towards accomplishing these results. Now, then, if it has done so much for Utah and other places, could its benefits not be extended to still other places where it has not yet been tried? The first 20 years in the history of Utah, before we had many trees, there was little or no rain in the month of June, extending back to Nebraska and Kansas, Would it not be possible to get water out of the Platte, the Republican, or the Arkansas rivers? If it can be done, I can assure our friends living there that it would be a good, paying investment, and it would be worth trying.

I believe that this system of irrigation is still in its infancy, even here in Utah. If some methods could be adopted to save, to store, or to hold the waters from running to waste, until it would be needed for use, much greater results could be accomplished. But as the people become more interested, there is no telling what may be accomplished. I am not sure but that great, uncontrollable, muddy Missouri, that is now running rampant down through the Mississippi valley, could, perhaps at a great expense, be brought down through the Dakotas, Western Nebraska, and Kansas, and possibly down into Texas. If this could be done, who could estimate the millions it would be worth to the country?

I notice some discouraging reports on account of cold and wet weather. While we are having an unusually wet June for this country, there is no danger of getting more rain than we need. The prospect for a good honey-flow is encouraging.

Our bee-keepers are troubled with ants and yellow jackets or wasps. If any of our friends know of anything that will destroy them, we would be very glad to hear from them. We can keep the ants off of the hives, but we have too many to destroy by any method that we have as yet heard of.

Salt Lake City, Utah, June 19.

"A Dearth of Honey"—Suggestions.

Written for the American Bee Journal

BY "BEN THERE."

That's been the cry nearly every season of late, and who's fault is it? Now, don't lay it to the weather, the rains, the "cold snaps," or to any other natural cause than *yourself!* The good Lord has provided everything just as it should be, for the good of man and bees; the difficulty is to be found in the first animal mentioned.

It seems, in the majority of instances, that the want of proper knowledge and its judicial application is responsible for the "dearth." Just take a look at the premises of most farmers who aspire to keep bees! What surrounds them that could encourage bees to do well—to lay up for themselves and their keeper a nice lot of exceedingly tempting honey,

fit for the delicious bread that his thrifty wife bakes every other day? Does his front yard look like it? The house is surrounded with "planten," quack-grass and burdock, except here and there a big bare spot that the dog lies in to cool. Where a beautiful lawn ought to be, "pussley" and weeds abound. Where white clover and melilot should make the air redolent with sweetest perfume, the stench of decaying vegetation would paralyze a Chinaman! Where roses, honey-suckles and hollyhocks should be in abundance to beautify and cheer the home that the "women folks" work so hard to improve, there the festive mullen raises its head toward the eves, and the wild buckwheat clings and thrives for next year's ample seeding.

Go just beyond, into what the leige calls his orchard, and what conditions do you observe? Apple trees big enough to bear bushels, and feed colonies on their fragrant blooms, dying from suckers and borers! Dead limbs left as skeletons to bleach with the suns of years. The ground in which the trees stand is covered with briars and brambles that a goat would not deign to tramp through. Is it any wonder that a place so bereft of flowers, shade and fruit, should afford little substance for honey? Why, if it were not that the busy bees steal substance from his neighbors, they would themselves starve to death!

And what is the remedy? *Common-sense* and *earnest work!* Root out your weeds; manure plentifully; let the plow in deep; harrow well, and sow on enough white clover seed on both orchard and lawn. Let the children sprinkle all the soap-suds to make fast growth; borrow a knitting-needle, look up the borers' holes, and push the needle in—it will do its work. Carefully cut off all the suckers and dead limbs; lay bare the neck of the trees, and put around each a good, big shovel full of those ashes you have near the house—they will manure and add new life to the trees, and make it mighty uncomfortable for the next crop of borers.

In fact, use your common-sense and energy; then will blossoms come, bees thrive, honey plenty, fruit in abundance, and the family rejoice at the greatly improved appearance of the dear old homestead. You will be the wonder and the envy of your good old neighbors. They will look over the fence, admire, and feel impelled to imitate your good example. Methinks I hear them exclaim, "Verily, Brother Jones hath taken upon himself a veritable 'hustle!' Great is Bro. Jones!"

So do, and I pledge you a sweeter smile from the dear wife, and greater admiration from the children. Selah!

North East, Ill.

The Cortland Union Convention.

Written for the American Bee Journal

BY C. W. WILKINS.

On account of the inclemency of the weather on the day appointed for the meeting of our association with Mr. Houglin, of South Cortland, N. Y., it was postponed until June 6, 1894.

The morning of the day designated dawned bright and beautiful. The roads were in fair condition. The atmosphere was pregnant with ozone, stimulating the weak, and giving greater vigor to the strong. Indeed, all nature seemed to speak, and in verbal concert announce the proximity of not only a more pleasant and a more beautiful day than it had been our privilege to behold for three weeks, but it also seemed to whisper, in tones both sweet and musical to the ears of the apiarist, "You will have the most enjoyable and profitable meeting it has ever been your privilege to attend."

Did we realize in fact what we anticipated in theory? As "actions speak louder than words," any beholder of the scene of pleasure, gayety, and spirited interchange of ideas, would have turned away without asking a word, confident of the unimpeachable success of the meeting.

As we neared the residence of Mr. Houglin, the most casual observer would be impressed with the fact that he was not only entering a prosperous farming community, but was entering the home of one of the "kings of the profession," who through industry, frugality and perseverance had made himself an example by whose experience all might learn a valuable lesson.

After a *very* pleasant morning spent in social intercourse, the company were invited to a most excellent lunch, to which all did ample justice, with the unflagging vigor of "the little busy bee." From personal experience, I should say that all got up from the bountiful repast with a far more uncomfortable feeling in the body, but a more satisfied condition of mind than they entered the dining hall.

At the invitation of Mr. Houglin, all were very pleasantly entertained in walking out to the apiary of some 85 colonies of bees, which appeared to be in fine condition, considering the very bad weather for the preceding three weeks. The guests were also much pleased in looking over the well-kept grounds, interspersed with many heavily laden fruit-trees.

The company tardily repaired to the sitting rooms, loth to leave such beautiful sights as Mr. Houglin's perfectly kept farm had afforded them.

The meeting was then called to order by President R. Wood, of Cortland. After the usual preliminaries, a vote of thanks was given Mr. and Mrs. Houglin for the elegant manner in which they had entertained the company, and their unequaled hospitality.

Discussion was opened by the President asking the company in successsion for their opinion as to what the object of our association is. Was it a profitable investment. If so, what could we name that we had learned to-day, that had been of benefit to us.

In the remarks drawn out, it was shown that we had all received an object lesson to the effect that patience, frugality, and honest industry have their reward in this world. That mutual stimulus and lasting vigor was obtained by this social intercourse and exchange of ideas. In fact, object lessons were continually presenting themselves for our mental discussion.

After some other interesting discussions, the meeting adjourned *sine die*, and the company regretfully dispersed, sorry that a day of so much pleasurable enjoyment had drawn to a close, but feeling well paid for their journey, no matter how far circumstances had located them from such friends as Mr. and Mrs. Houglin.

Homer, N. Y. C. W. WILKINS, *Sec.*

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Light Honey Crop.

The honey crop is light in this locality, on account of the drouth.

GEO. W. PENN.

Carlisle, Iowa, July 10.

Alfalfa Yielding Freely.

The weather is extremely hot, and the alfalfa that is yet uncut and in bloom, is yielding honey freely—the best yield of the season so far. R. H. RHODES.

Arvada, Colo., July 10.

Hardly Enough for Winter Stores.

No clover here, and the basswood bloom has come and gone. Its yield will hardly more than furnish the winter stores. The promise for fall bloom is not encouraging.

Buda, Ill., July 6. C. COVELL.

Good Basswood Flow Expected.

Reports are favorable for a good flow of honey from basswood. Our bees have been gathering surplus honey from the basswood here in the city. It has now been out for a week, and is about that much earlier than the basswood in the forest. Bees do not belong to the A. R. U., and continue to work. H. G. ACKLIN.

St. Paul, Minn., July 6.

Gathered Honey—Packing Bees.

The past was a wet and cold spring for bees, but in spite of the weather they have built up in fairly good condition, and have gathered quite a quantity of white clover honey. My apiary is run entirely for the production of comb honey, and I use the eight-frame dovetailed hive for summer. In winter, they are packed in home-made outside chaff cases, made out of pine lath. This case is large enough to allow a 2½ inch space on all sides, and 10 inches on top where chaff is most needed. The top is covered with tin. I use hayseed and buckwheat chaff for packing. A. G. AMOS.

Delhi, N. Y., July 7.

Sulphur Cure for Bee-Paralysis.

I have experimented with the sulphur cure for bee-paralysis, and believe it a success—at least it or something else has cured a very obstinate case for me. My plan of treatment was this:

I took a common pepper-box and filled it with pulverized sulphur, and gave the bees and combs a generous sprinkling of the sulphur. I was careful, however, to not sprinkle the uncapped brood. The third day after this application, I could see a marked improvement in the bees, and I then gave them another application of the sulphur, and within a week the cure seemed to be complete.

If sulphur does prove to be a specific for this dreaded disease, what a boon to bee-keepers! And how simple and easy of application!

In my experience I have never seen bees do better at this season of the year than they are now doing in this locality. Basswood did fairly well, and sourwood is extra, and is now in its prime. It was thought one month ago that we would get no surplus honey this year, but a surplus is now assured. H. F. Coleman.

Sneedville, Tenn., July 4.

Not Owner, but Manager.

One would naturally get the impression from my statement on page 25, that I am the owner of 250 colonies of bees. I neglected to put in that statement that I am manager for Mr. E. B. Ross, of two of his four apiaries. He has one at his home (Syracuse), one at Tully, one at Warner's, and one at Camillus—in all about 250 colonies in fine condition. I have full control of the Camillus and Warner's apiaries, seven miles apart.

Bees are doing finely at Warner's. I wish I could say the same of those at Camillus. Basswood is now in full bloom, and all may end well yet. J. W. Tefft.

Camillus, N. Y., July 5.

Ants—Report for 1893, Etc.

I got rid af the ants around my hives last year by rubbing pennyroyal around them where the ants were traveling; also a very kind bee-keeping friend wrote me to make a circle of coal-oil around the hives twice a week for two or three weeks. I tried this, and they disappeared. I used to correspond with this friend, and was successful in all that he told me.

In the spring of 1893 I started with 8 colonies, a few very weak. I had re-queened them all except one which proved to be extra good in 1892, although I had no record of the queen's age. Before swarming-time I found her with all drone-brood and a few queen-cells started, so I pinched the queen's head off, destroyed the cells, and gave them a cell of my best Italian.

My bees averaged 50 pounds of nice white honey in one-pound sections. The best I took 84 pounds from; this one contained a queen from the South; and the worst gave me nothing. Any one reading this can see that I was in "ups und downs," just learning what bees are. Well, one Sunday in June, while I was at church, I heard that my bees were swarming. Well, thought I, they may just swarm, because I had the Alley trap at each hive. After church I went around the church corner in my yard, having seen the bees clustered on a high tree, so I came to the hive where the bees had swarmed out. This one swarmed the day before. I hived them on starters that time. I did not think of a frame of unsealed brood preventing swarming out; anyway this was a big, strong swarm, high on the tree. I left them without looking after the other hives, and soon they swarmed up and all around. Some went back, and a lot went across a large wheat field. Afterwards I learned that two swarms had been out. The trap was pushed a little from the hive.

Some time in August I found, or was told of, a large bee-tree, one-half mile from my home, which was not on the land where I was living. They seemed to be yellow bees. I started off to the manager of the farm, telling him that I came to buy one of their trees containing a swarm of bees. "Bees," said he; "if there are bees in, you can buy." He asked $3.00 for all. I paid it, and went to see my brother-in-law, who is one of the very best fellows I can get to help with bees. The tree was a large oak, the hole 60 feet from the ground, where the bees were working in and out, so we were not bothered with the bees while sawing the tree down. At last it fell, and sounded very nearly like thunder. And then the sport went on! We could do nothing right where the wreck was for the first 20 minutes. A near neighbor came to see. He would not put a veil on, but went right there. Ofttimes I can keep from laughing about things, but I and no one else could keep from shouting, for he hustled like Old Mr. Blobbs, as shown in the Bee Journal last fall. The way he had to run, and scrape—indeed, it was too bad!

Well, we had not to open much to see what it was. The honey was rolling and dripping. The combs had been mashed together, pieces lying here and there, and an awful muss of dead bees. We had a wash-boiler and few tin pans to get the honey in. The bees that were not killed were mostly on the wing, filled with honey. We could every now and then see a yellow drone, but no queen. We returned home with the honey we fished up. This was 20 pounds after it was strained.

The next morning I got up early to look after the bees where the wrecked tree was, and found them clustered all over a piece of wood containing a little bit of comb. I had fixed a case (or hive) with foundation, one frame of unsealed brood placed right where the bees were, and started them in. I left this there awhile, and then took the case and bees home, and soon learned that the queen was saved.

Well, I had the 20 pounds of honey to start them on with, and on Nov. 30th I had

a very good colony in the row with the others.

The tree and all cost me $11.50. The lumber and wood is worth to me $25, and I had the bees back again. This queen I bought in the South, which is truly a hardy race.

On Nov. 30th I had 17 colonies on the summer stands, with plenty of honey and no packing, only a soft board over them.

Brickerville, Pa. E. B. KAUFFMAN.

Bee-Veil—How to Make and Wear.

I herewith will tell how I make my bee-veil, as it may be useful to some.

I take a small wire and make a frame 7 inches by 8, wrapping the ends firmly with flax thread. Upon the side of this I sew silk tulle, stretch it to the opposite side all it will bear, and sew it; then on the side I sew and stretch it to the opposite. I now have a face veil that will not crease or fold, and as nearly invisible as it is possible to have it. I cut out of the veil and insert this so that it suspends nicely from the rim of my straw hat. It keeps it away from the face, and makes it pleasant and cool to examine the bees through.

Shall I give Mr. Hasty a suggestion? Have a deep veil. Get from your harness shop a narrow strap of sheepskin leather, with buckle; gather the back of the veil and sew it into this strap, the distance from shoulder to shoulder underneath the arm. Now make a slit in the veil to the top of the shoulder, and bind this around so that it will not fray out. At the back of the buckle sew a piece of silk elastic ½ inch wide (you must measure the required length); to the other end sew on a large hook, and where it is needed on the other end of the leather strap sew on an eye. Now you see, when you put on the veil and buckle it around you, the front part of the veil will be loose. (There should be a piece sewn on to the front to lengthen it.) Now if the elastic is passed over this, and hooked into the eye, it keeps the veil drawn snug and tight in front, so that no bees can get under, and I think the hook and eye would be easier handled than the pin, as suggested by Miss Emma Wilson sometime ago.

Prosser, Nebr. SIDNEY HARRIS.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of last number of the BEE JOURNAL for description and prices.

Honey & Beeswax Market Quotations.

ALBANY, N. Y., July 12.—The honey market is not fairly opened yet, but there is some demand and we think we are going to have good sales. We quote: White clover, new comb, 14c.; extracted, 7c. H. R. W.

BUFFALO, N. Y., May 14.—Trade is very slow, and we have still a liberal stock on hand. We quote: Fancy comb, 13@14c.; choice, 11@12c.; dark and common grades, 8@9c. Beeswax, 25@30c. B. & Co.

CHICAGO, ILL., May 10.—The market for comb honey is not of large volume at this season of the year; a fine article of white comb brings 15c. in pound sections. Extracted slow of sale, at 4@6c. Beeswax, 25c.
R. A. B. & Co.

CHICAGO, ILL., Mar. 24.—The honey market will be very quiet for the balance of the season. We will not do much business until new honey comes in. We cannot quote prices but will obtain the best possible price on what little stock we will sell until early fall. Beeswax is very active at 25@26c. J. A. L.

CINCINNATI, O., June 19.—Demand is slow for all kinds of honey. The range of prices is 4@6c. for extracted, and 12@14c. for best white comb. There is no sale for dark comb honey at any price.

Beeswax is in fair demand at 23@25c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, Mo., Apr. 6.—We have had an exceedingly slow trade on honey this season, and prices ruled comparatively low. We quote to-day: No. 1 white comb, 1-lb., 14@15c.; No. 2, 13@14c.; No. 1 amber, 12@13c.; No. 2, 10@11c. Extracted, 5@7c.
Beeswax, 20@22c. C.-M. C. Co.

NEW YORK, N. Y., May 25.—New crop of Southern honey is arriving freely. The market is well supplied and demand very light. We quote: Common grade, 50c. per gal.; choice, 55@60c. Beeswax is firm at 28c
H. B. & S.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central ave

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. | DEVOTED EXCLUSIVELY TO BEE-CULTURE. | Sample Copy Free.

VOL. XXXIV. CHICAGO, ILL., JULY 26, 1894. NO. 4.

Boracic Acid—a quart of boiling water to a tea-spoonful of the drug—is said to be an immediate cure for bee-stings.

To Remove Propolis from the hands, clothing, etc., use alcohol, ether or chloroform, as they are ready solvents of bee-glue.

Not a Large Crop has been taken by bee-keepers this year, if we may judge from the reports thus far. In many localities the severe drouth has cut off the honey resources, and doubtless the bees must be fed to tide them over.

A short crop should mean longer (or better) prices for honey this year, so those who are fortunate enough to have any honey for sale, should use extra care in marketing it, in order to realize the best financial results possible.

It is the height of folly to rush much honey to any one market, and thus overstock it, and cause prices to be lowered. A better way is to market it yourself, if you can do so—sell it in your home market—to your neighbors who do not keep bees, or else sell it from house to house in the nearest towns. The producer may as well save the middlemen's profit, and at the same time work up a demand that would take all his honey, year after year, and also at much better prices than can be realized in any other way.

With a superior article of honey (either comb or extracted), and a well worked home market, we believe the best and most satisfactory results in bee-keeping will be attained.

What Have You Learned this season in your apiary? Have you discovered any new kinks that are worth knowing? If so, why not tell us all about it, and thus contribute your share toward the general good? The BEE JOURNAL is here to aid in such interchange of ideas as shall be most helpful to all, and the only way to get the greatest amount of good *out* of it, is for each one to put *in* something of value. What have *you* to give?

☞ I have never succeeded in rearing queens which pleased me every time, till I commenced to work in harmony with Nature's plans.—*Doolittle.*

The Honey-Flow for 1894.—We find in *Gleanings* for July 15th, this editorial item about the honey-flow for this year, which will be of interest:

The honey-flow, so far as reported, seems to be widely different in various localities. So far in Ohio—at least in our vicinity—we have had a good flow from basswood. Certain parts of New York State and Pennsylvania report the same. As the letters are coming in day by day, about half report this as being the poorest of the poor seasons so far. The other half—especially those in the basswood regions—are jubilant over their fine crops of honey. In a few days we expect to send out statistical blanks to

get more accurate information. It is a little to early yet to judge accurately of the season. But we know enough already to feel assured that a very large number of bee-keepers will get no surplus.

The drouth has interfered greatly with nectar-secretion in many places, and especially here in Northern Illinois, but the drouth was broken last night (July 19th), and the refreshing showers we are now having will help to save the corn crop, and likely to give the flowers another start. The fall crop of honey may yet come to the rescue, and make up for the lack of an early crop.

Beginning Bee-Keeping.—"Before starting in the business, the prospective bee-keeper should inform himself in the art." So says Prof. Cook, and wisely, too. One way to "inform himself" is to read the AMERICAN BEE JOURNAL in connection with the standard books on bee-keeping. It is a much mistaken idea to hope to succeed in bee-keeping, or anything else, without some prepartion or previous information about the work to be undertaken.

To American Bee-Keepers.—Mr. Frank Benton, the pushing Secretary of the North American Bee-Keepers' Association, has issued the following important address:

TO THE BEE-KEEPERS OF NORTH AMERICA.

The North American Bee-Keepers' Association was organized in December, 1870, with the avowed object of "promoting the interests of bee-culture throughout North America." All who are familiar with its work know, and its published proceedings also show, that it has adhered to this purpose, and has contributed as much as any similar society in the world to the spread of a knowledge of practical and scientific apiculture. Reviews, translations, and citations from these Proceedings appear in the apiarian journals of all European countries. Much has in this way been done by this society toward giving to the American system of apiculture the recognition which its great merits justly entitle it to receive.

APICULTURE PROGRESSING AND THE SOCIETY FLOURISHING.

The Association was never in a more flourishing condition than at present, having reached at the last meeting the highest membership it has ever possessed. But the remarkable progress made by apiculture in the United States and Canada within the memory of many who are still among the active members of this society—in fact, the development of this industry until it has become one of considerable national importance—makes it certain, when we consider the wide fields yet unoccupied, that still greater things may be expected. If all who are interested in this pursuit, and are proud of the rank which the apiculture of America holds are willing to assist the objects of this Association to the extent at least *of becoming members and retaining continuous membership*, results not merely gratifying to all, but substantial benefits to every member will follow. The field is wide enough for all, and there should be no holding back through a spirit dictated by a feeling that one's own advancement is hindered by the well-earned progress of his fellow-man. Each should have instead a just pride in the knowledge that he has contributed to the general advancement.

WHAT THE SOCIETY CAN DO.

The North American Bee-Keepers' Association might aid in obtaining National and State legislation favorable to the interests of apiculture, both in securing and promoting attention to this branch at experiment stations, and in checking the sale of adulterated apiarian products. Should this body be composed permanently (as it certainly ought to be) of three-fourths or more of the intelligent apiarists of the country, its opinions, resolutions, and requests would carry with them far more weight and influence than they do at present. The time has come, in fact, when apiculture, having arrived at the dignity of a distinct pursuit, and having enlisted the attention of some 300,000 of our citizens, has within itself forces worthy of much consideration—forces that should be united in order to do more effective work.

EVERY BEE-KEEPER,

therefore, whose eye falls on these lines is personally requested to ally himself with the members of our society, whether he can be present at the regular meeting or not. The Proceedings, published in pamphlet form, are sent to all who pay the annual membership fee, and the names of all members appear in the printed list.

The next Annual Convention will be held at Saint, Joseph, Mo., on Oct. 16, 17, and 18, 1894. To avoid confusion at the time of the meeting and just before, members, or those who wish to become such, are requested to forward their annual Dues ($1.00) at the earliest date possible, to the Treasurer of the Association, Mr. George W. York, 56 Fifth Avenue, Chicago, Ill., who will return a neat membership-card. Those who attend the convention are requested to present membership-cards and secure badges.

State or local apiarian societies paying an annual affiliation fee of $5.00 receive medals to be given to their own members as prizes; and delegates appointed by these societies to attend the conventions of the North American receive membership-cards and badges free.

For further information address:

FRANK BENTON,
Secretary North American Bee-Keepers' Ass'n,
Washington, D. C.

The foregoing statement and appeal is so clear and emphatic, that it hardly seems necessary for us to say more than that we fully endorse it. We ought to build up a grand international bee-association, and the only way to do it, is for each bee-keeper on the continent to become a member, and thus enjoy the great benefits that will inevitably result from a large and representative membership.

We are now ready to receive your dues for 1894.

Salvation and Honey.—One of our exchanges says it is "indebted to Rev. P. H. Bodkin, of Hanford, Calif., for this bit of experience:"

I had a unique experience last Sunday at Grangeville. I preached a sermon in a church whose walls are filled with "little bees and honey." For three years the bees have had possession, and all efforts to rout them have been futile. Like the sparrows of David's time, they have "a house for themselves" in God's temple, and there they doubtless will remain as long as the church stands. There are three swarms in possession, each having a side to itself. When the thermometer rises to 105 degrees, and it does very frequently, then the honey begins to run. It stands in pools about the foundation. It is readily caught in pans from this natural extractor. We do not know that Pastor Crist and his wife are alarmed over the prospect of what an extra hot day might do in melting down the amber walls of their church, and flooding them out with flowing streams of honey.

The bears in the mountains may get a scent of that church some night, and then there will be lively times around the parsonage.

The pastor would, no doubt, like to have the honey if he could get it without tearing down the church, and that would hardly pay. It looks as if the bees were there to stay, and will pay for their lodgings by keeping the pastor and congregation "very sweet."

What great church-going "little people" bees are! And what a glorious church the above must be, with its "streams" of salvation and honey "flowing" freely for all!

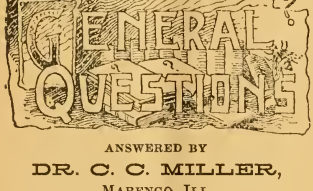
Bee-Keeping in Georgia.—Mr. A. H. Homburg, of Maryland, has sent us the following clipping from the Valdosta *Telescope*, a Georgia newspaper, which may be of interest. The Mr. Duncan mentioned is one of our subscribers, and likely will be surprised to read the item in the BEE JOURNAL. Here it is:

In naming the industries of DuPont, a few weeks ago, I omitted one that we can boast of more than any other, that is Duncan & Conrad's apiary. They have at this place 275 colonies, besides they have 100 or more colonies some three or four miles below, and some three or four miles above, consequently their bees have the range of the swamps for eight or ten miles, this place being situated on the large Suwannoochee creek. The swamp is filled with wild flowers two-thirds of the year, consequently it is the best adapted place for the bees to secure honey in all this section of the State.

Beginning about Dec. 20th, the soft maple comes in, then next comes the tyty, about the middle of February the toopler gums, March 1st black-gum, April and May the gallberry, representing the largest yield, and making the finest grade of honey.

Mr. Duncan, the manager, has made this business a study. They started here four years ago with five colonies, and have increased from season to season until now they have the largest business of this kind we know of in the State, which requires almost all their time. Besides, Mr Duncan has invented a self-hiver, and he can sit off in the shade and watch the bees hive themselves without any assistance from him whatever.

Their honey-house is 14x24 feet, and they can carry in 1,000 pounds of honey, bees and all, and sit down, and in two hours' time the bees pass out through the gauze-wire bee-escape. They put up the honey in one-pound sections, then after carrying it through the rejector, etc., with 48 sections to a case, it is ready for shipping.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Keeping Bees on Shares.

Suppose I rent (or take) 20 colonies of bees in the spring of the year, what share ought I to have if I furnish the hives for the new swarms, sections, etc.?

Luce, Mich. W. C.

ANSWER.—In this day of strikes I'm not going to try to settle differences between labor and capital. As a rule, working bees on shares is not a very satisfactory thing, and there's danger of dissatisfaction on both sides. As you furnish all the labor and part of the capital, the only thing the other man should have is a good interest on the value of the capital he furnishes, that is the bees and hive they occupy. If I were to make a guess in the premises, I should say he would do pretty well if he should get a fourth of the surplus honey and increase. If the increase should be a single swarm, it wouldn't be easy to take a fourth of it, but part of the surplus might be traded for the share of the swarm.

Preventing Swarms—Pulled Queen.

1. If I examine my bees every eight days, and cut out queen-cells, can I prevent swarming?

2. What are we to understand by a "pulled queen?"

3. Please describe Mr. Hutchinson's system of re-queening to prevent swarming? S. H.

Prosser, Nebr.

ANSWERS.—1. No, you can't rely on it. Sometimes it will succeed and sometimes fail.

2. It doesn't mean that she is taken by the leg or wing and pulled out of her cell, as some have seemed to understand, but that her cell has been pulled open, allowing her to emerge sooner than she would otherwise have done. When a colony has sent out a prime swarm and contemplates further swarming, a number of queens usually mature in the hive, and about a week after the issuing of the first swarm, if you put your ear to the hive, especially in the still evening, you will hear a young queen piping, answered by one or more queens in a coarser voice. The piping queen is at large, and those that quahk are still in their cells. These latter are, however, mature queens, having a circle gnawed in the capping of the cell, waiting for a chance to come out. Take one of these cells, pull off the capping and you have a "pulled queen."

3. I don't know that he has any peculiar system. Each year he sends South and gets young laying queens, putting them in place of his older queens, and it is well known that a queen of this year's rearing is less likely to swarm than an older one.

Persimmon as a Honey-Yielder.

Are persimmon blossoms good for honey? Father has 6 or 8 trees of them, and the bees just swarm on them most of the day. The blossoms come in between the poplar and linden.

Burkett, Ind. N. L. V.

ANSWER.—I don't know anything about the persimmon as a honey-yielder. Perhaps some one can tell us about it. But if the bees are busy on it, it is pretty safe to say that it is a good yielder, for bees are not likely to fool away their time on blossoms that yield no honey.

Droneless Colony and Swarming.

I have five colonies of bees in my yard, all of them strong in bees, and one of them very strong, but there are no drones in the yard, nor have there been any this season. Will they swarm while they are in a droneless condition? They are doing fairly well, considering the dry weather we are having, and the strongest colony is at work in the super.

Bees in neighboring apiaries that have drones are killing them. A. S.

Boone, Iowa, July 2.

ANSWER.—You need not expect a swarm from a colony that is killing drones. If the killing is general, no

swarms need be expected. Sometimes, however, a colony that has reared a young queen may be killing drones without any falling off in the harvest, and this will be no indication that other colonies may not swarm. Again it may happen, as it did quite generally this year, that early in the season the weather may be such that there is a general slaughter of drones, and a good harvest coming afterward will bring a fresh crop of drones as also swarming. Unless buckwheat swarms are common with you, you will not be likely to have swarming this year. There are exceptions to all rules, and a droneless colony might swarm, but I should not expect it.

Wants the Honey in the Sections.

I have a colony of bees with a young Italian queen introduced last spring. There is an abundance of honey coming in, yet the bees will not work much in the supers, although I baited them, but fill up every available space in the brood-nest. There is only enough brood in the hive to fill three or four frames, and the other space is filled with honey. Will feeding sugar syrup during a honey-flow make the bees run the honey from the frames into the sections, and make the queen lay more? or do you think it is the fault of the queen? What had I best do to make them store the honey in the sections?

There will be more honey later on, but not so white as that I am getting now, which is from sourwood, and almost as clear as water. J. F. H.

Brinkleyville, N. C.

ANSWER.—Feeding sugar syrup may help to start the queen laying when she slacks up on account of scarcity of pasturage, but it will do no good in your case, for your trouble seems to come from plenty rather than scarcity. I am really at a loss to know what is the trouble if there is nothing wrong with your surplus arrangements. Possibly the fault may be with the queen.

Profitable Bee-Keeping, by Mrs. Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Aug. 1.—Central California, at Hanford, Calif.
J. F. Flory, Sec., Lemoore, Calif.

Aug. 16.—East Tennessee, at Whitesburg, Tenn.
H. F. Coleman, Sec., Sneedville, Tenn.

Oct. 16–18.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.

Sept. 11–13.—Nebraska State, at Lincoln.
L. D. Stilson, Sec., York, Nebr.

Sept. 15.—S. E. Kansas, at Bronson, Kan.
J. C. Balch, Sec., Bronson, Kans.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearing"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

Bound in paper cover, postpaid, 65 cents; or given free as a premium for sending us two new subscribers; or clubbed with the BEE JOURNAL a year—both for only $1.40. Send all orders to the BEE JOURNAL office.

Read our great offers on page 99.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Value of a Happy Disposition.

Verily, "a contented mind is a continual feast." Of all the delightful sensations that keep trouble and sickness from the door, a happy disposition that is perpetually inspired by deeds of kindness, excels all other factors in dispelling disease.

One need not be rich to enjoy the blessings of a joyous mind; indeed, the rich seldom are so blessed! The infallible prescription for this extolled condition is, "Do unto others as ye wish that others should do unto you." If we would but be guided by this grand precept, *selfishness*—that curse to humanity—would be removed, and our actions and circumstances so changed as to make of this earth a very Paradise! Our worries come principally from this one vicious source. And it is safe to say that fretting begets more sickness of a dangerous degree than perhaps any and all other causes combined. Call the engendered ailment what you may, sooner or later it develops into the condition that kills!

Doctors have some very euphonious names for diseases that if honestly explained would not be pleasing or flattering. "*Insomnia*," for instance, sounds very distinguished. Plain "can't sleep" would not be considered half so aristocratic, and if the *cause* of it were known, the verdict might be still more uncomplimentary! When a person cannot enjoy good rest there is usually something the matter not exactly to his credit. He, or she, who properly respects the rights of others, and tries to smooth the pathway of as many less fortunate as naturally come in his way, will have little trouble with digestion or sleep. But if as often happens, he lies awake o'nights to plan the discomfiture or ruin of his neighbor, he will quite easily acquire "loss of sleep," and it serves him right! Then, in turn, that begets nervous conditions, his system is enfeebled, his digestion impaired, his temper becomes irascible, children learn early to call him "Old Cross Patch," and all lose respect for and shun him. He has perhaps amassed a fortune, just in time to leave it, be buried, and forgotten!

Do you say this is a moral rather than medical topic? But the duty of the true physician is quite as much to point out causes that lead to sickness as to administer remedies. Indeed, it is much wiser to indicate the prevention of disease than its cure, and success more often attends the former than medicines insure recovery.

Then strive after cheerfulness, avoid those actions, of mind or body, that you intuitively know will bring discontent. To this end you must govern your acquisitive desire for that which you cannot yet afford, and in all ways refuse obligations you are not certain to be prepared for when the time of requirement arrives!

Bowlegs and Difficult Teething.

I don't wonder you feel so anxious about baby Rob's little bowed legs! Any loving mother naturally will. But be of good courage, and don't lay to heart all the advice, admonition and fearful foreboding of your good friends, who all *mean* well enough, but are not quite competent to give you safe counsel. I can imagine how their look of horror can make a young mother feel terribly apprehensive, but just keep your sensible head on your shoulders and *reason* a little.

Rob will be all right and have just as straight and strong legs as any boy, if you will just do what I suggest. No, he don't need any "braces" or other kind of harness for his wee legs. Keep all those expensive instruments of tortures off the little fellow. The *reasons* that his legs are crooked are mainly that his system is improperly nourished; and, then, the likelihood that in your great desire to see him look "awfully cute," you, or his "Daddy," try to make him stand up and walk. Under such unreasonable treatment it is simply a wonder his legs are not bent double!

The bones are hardened and kept so by the phosphate of lime that the necessary food contains to properly nourish us, and when bones in little ones are soft and yielding, it is evidence that Nature's laws have been disregarded in this respect, and the result has followed.

When the child is born, it should become the strictest care of the wise mother to so regulate her diet, that the required amount of lime enter the system to properly harden the bony structure of the child. To this end the mother should eat liberally of oatmeal and cracked wheat porridge, bread,

butter, fruits, "cottage cheese," salads, "greens," eggs, and fresh fish, to the exclusion of meat and all kinds of pastry. Buttermilk is a healthy drink, where one is not averse to it. This mother's diet is quite sufficient to prevent bowlegs and difficult teething in children, but when it has been neglected, and for other reasons, the child shows plainly the deformity we are considering, let the mother adopt the above diet while nursing her baby, and, if weaned, then the child should have the first two articles of food several times per day, and plenty of fresh (but better, skimmed or boiled) milk with a tea-spoonful of lime water added, for its daily drink. Don't allow him to stand on his feet, but frequently expose his bare legs to the hot sun until they become tanned brown as a berry. Let the child play out in the sun, on a sand-pile, where he will naturally stick his feet and legs, playing, greatly to his benefit.

Daily bathe the body and thoroughly rub the legs in weak salt water, and you can depend upon his perfect recovery with greatest assurance. Of course, if the deformity is due to accidental injuries received, this treatment will not be sufficient—a good surgeon should then be consulted.

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 95 for advertising offer.

Have You Read the wonderful Premium offers on page 124?

A Nebraska Storm.

Written for the American Bee Journal

BY MRS. A. L. HALLENBECK.

Far away to the west, while the sun still shone bright,
Rolled up in its grandeur a cloud black as night,
And while the dark masses rose fold upon fold,
The far-away, echoing, low thunder rolled.

From the field came the boys with hurry and shout,
And quick from the traces the horses took out,
As on came the shadow that darkened the day,
While black rose the dust-billows marking its way.

The poultry-boy hurried, the gate opened wide,
And drove all his fluttering, small broods inside,
And we all hurried in before Nature's dark frown,
While with haste and a clatter each window went down.

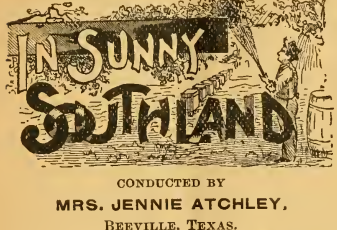
On, on comes the shadow, from earth to the sky;
The Wind Giant reaches his long arms on high;
The roof of the stable he brushes away—
The trees bend before him, or break in his play.

He tears from the wind-mill one busy, white wing.
And then throws it away, a poor, broken thing;
Uncovers the bee-hives, or tumbles them over,
And scatters the heads of the poor, dried-up clover.

As we watch the wild havoc, he hurries away,
And we gather the fragments he left of his play;
We cover the bee-hives o'er the big tear-drops fall,
Which the cloud-giant sheds in remorse for it all.

The thirsty earth drinks in the life-giving rain;
The clover re-opens its parched leaves again;
The flowers will spring from the freshening sod,
Nectar-laden with thankfulness unto their God.

Our wee, busy workers will gather the store,
To feed them and cheer us when summer is o'er;
So *we* thank the Father who sent us the rain
To show that none ever shall trust Him in vain.

Millard, Nebr.

CONDUCTED BY
MRS. JENNIE ATCHLEY,
BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 6.

(Continued from page 46.)

BEE-PARALYSIS.

This disease seems to be next to foul brood, and causes the bees to dwindle very fast. I have not seen a case of paralysis for a long time, there being none in this part of Texas; but in north Texas I used to be bothered with it. There have been so many remedies offered, and none of them effectual, that I fear it will be only a loss of time to repeat them here. I believe that it is unwholesome food of some kind that causes it, as they seem to have fever, as they swell up, and their hair comes off. Now, you all know that any swelling is caused from inflammation, and a fever sets in, or any derangement of the stomach is likely to cause fever. So I suppose we had better name this bee-disease "Bee-Fever," as it goes without a name.

Next, is to find a remedy. Who will first find an effectual remedy is unknown, at present I suppose, but testimony should be in order from all directions until we find a cure. I will advise clean hives, dry quarters, and good food, as I stopped it in my apiaries this way four years ago, and have not had it since, but I could not offer this as a remedy, for nothing was done or given the bees except clean hives and new combs of healthy honey, and I prescribed the same for others, and it failed. So I offer this as a suggestion only, and not as a resolution or remedy. If any one cures bee-raralysis, please let us know how you did it, that we may let all know it.

Bees in Northern States do not seem to suffer as much as those in the South, from this disease, but I believe Mrs. Axtell told me she lost very heavily two years ago by bee-diarrhea, and she lives in Illinois. She told me that she had to keep bottles of hot water about her bees to keep them from freezing, and dampness may have caused the disease in her case. It may be brought on by several ways. Bad food, cold and damp, or by too much pollen taken with honey. Let us all watch it closely.

BEE-MOTH.

This could not be called a disease, but I wish to call attention to everything that destroys the bees. In Northern latitudes the bee-moth has but a short time to work, as it takes warm weather for them to thrive. Here in the South a queen-rearing yard, or any colony that is not strong in bees *all* the time, will be killed outright if not properly and promptly attended to.

There are two classes or species of bee-moth here. The small, or center moth, is very bad indeed, and sometimes injures our bees, no difference how strong they are. The reason I have called or named them the "center" or foundation moth is, they work right in under the base of the cell-caps, and web the young bees fast, and they can't hatch, but gnaw off their cell coverings, and just work like a lot of pigs trying to get out of a pen, until they die. So when you see a squad of bees with their heads all uncovered, and wriggling for life, you can pull them out and see the little moth-worm hop out. Then you will soon learn what a center moth is.

The old, big gray-back moths are known, I suppose, by every one that ever handled bees, so I do not think it necessary to describe them here; but they are simply a large fly that lays eggs about the unoccupied part of the hives, and they grow rapidly, and soon grow to large, wrinkly worms that are very destructive, and it seems they just try to see how much comb they can destroy.

The worm itself is properly named "moth," as it can subsist upon anything that it can eat—dry, hard wood, and iron for ought I know, as it seems that nothing is too hard for them. But they seem to love pollen better than honey or comb, and quickly destroy old combs with pollen in them, if allowed to do so.

We make war against the moth, and kill them in many ways. Combs can be sulphured in a tight room, or soaked in water until all are drowned.

By all means try not to let the moths get a start on your honey, beeswax, comb foundation, or in your hives, as damage will be done.

There are many and numerous enemies to bees, but I will not take space here to mention any more of them, but mention only those that kill the bees outright if allowed to run.

Foul brood, bee-paralysis and bee-moth—all these will surely "get away with" the bees by and by, if not cured. It used to be supposed that paralysis would get well of itself, but it seems now from the reports of this and last year, that when well started it only lets go when its victim is exhausted.

Now, I think we had better learn the best way to dispose of our honey, should we be fortunate enough to have a crop to sell soon. I will relate to you in the next lesson how I have *always* managed to sell all the honey I could produce.

JENNIE ATCHLEY.

(To be continued.)

Non-Swarming Bees.

What is the matter with Dr. Miller and Doolittle? I see they are both praying for bees that don't swarm. Now, it seems to me that they both need to see some natural swarms come out in the spring, to stimulate them, as both of them have been complaining of overwork.

Well, this is the way I feel about non-swarming bees: There are no such bees, and in my opinion never will be that are of any account. You take a colony of bees that shows no disposition to swarm, and as a rule they are slow-motioned, poke-easy, and a kind of lazy outfit, though of course there are some exceptions. But give me bees that are full of vim, and that make preparations to swarm as soon as the proper season arrives, and they will not be found wanting for full supers, if there is any honey to be had.

In this latitude bees *will* swarm if they have a 10-bushel box to work in, and they will build a common-sized brood-nest in one corner and swarm. Room makes no difference.

Then, I would not have swarming done away with if I could, as it is almost a sure cure for headache, or almost any other ache or bad feelings. When the first swarm issues in the spring, I rush out, throw my bonnet, apron, and sometimes my shoes, right up among the bees, and shout out, "The bees are swarming!" and usually the whole family rushes out, and what a joyous time we have! Headache gone. Backache gone. New life, new energy, and stimulated to the highest pitch; and that one swarm is worth more to our health and ambition than ten bottles of Hostetter's bitters.

Then talk about getting bees that won't swarm! No, sir ree! give me bees full of life and vim, and that will swarm as nature demands, and I am content. But when we get enough swarms we *very* easily control that part. We have a good remedy for the swarming fever, and it will surely stop it if properly administered.

Now, Bros. Miller and Doolittle, don't cry for non-swarming bees any more. If you ever get 'em, I fear they will be worthless. JENNIE ATCHLEY.

Wax Secretion and Sugar Syrup.

Query 933.—Do bees, while being fed on sugar syrup, secrete wax the same as when they are feeding on honey?—Subscriber.

Yes.—J. E. POND.

Yes.—J. A. GREEN.

Yes.—R. L. TAYLOR.

They do.—M. MAHIN.

Yes.—G. M. DOOLITTLE.

Yes.—EMERSON T. ABBOTT.

Not the same.—H. D. CUTTING.

I suppose they do.—EUGENE SECOR.

Yes. Why not?—J. H. LARRABEE.

I never tried the experiment.—J. M. HAMBAUGH.

I don't know, but I think they would.—E. FRANCE.

Yes, though, *perhaps* less plentifully.—DADANT & SON.

I never have fed syrup enough to know.—JAS. A. STONE.

Yes, if fed enough to stimulate them.—MRS. JENNIE ATCHLEY.

Not entirely, unless pollen is abundant.—MRS. L. HARRISON.

It is said that they do even in larger quantities than on honey.—P. H. ELWOOD.

Yes, I believe they do. (But, I am not positive.)—W. M. BARNUM.

I could never see any difference, and believe that there is none.—A. J. COOK.

It is claimed that they do. I have never experimented in that line.—MRS. J. N. HEATER.

They do if the feeding is done at the proper season for them to secrete wax. —J. P. H. BROWN.

I've had them pile white wax in the corners of the feeder while being fed sugar syrup.—C. C. MILLER.

They secrete wax fed on sugar, but perhaps not to as great an extent as they would if fed honey.—S. I. FREEBORN.

They secrete wax when feeding on sugar syrup, but honey is a superior article to produce wax in bees.—G. W. DEMAREE.

They probably do, but I never fed enough to find out. Considerable would need to be fed before the bees would begin wax secretion.—G. L. TINKER.

If only a little is fed to promote spring breeding, little or no wax will be secreted. If sugar syrup is fed liberally in warm weather, and it is necessary to build comb, the bees will secrete the wax.—C. H. DIBBERN.

Continuous Advertising, even if it be only a small announcement, pays the advertiser the best in the long run. Spasmodic advertising, like "spasms" of any kind, is unsatisfactory. To secure the very best results, year in and year out, you must keep your name and business before the public. Only by so doing can you hope to keep from being forgotten when the time comes that your would-be customers wish to purchase what they want.

Besides, in the fall of the year, more agricultural papers send out large numbers of sample copies, and the advertiser fails to get the advantage of reaching the thousands who get the free sample copies, unless he keeps his advertisement running *all the time.* This is a matter worth thinking about. Heed the lesson taught by that intelligent comb foundation firm, Chas. Dadant & Son, and also others, whose advertisements are found in *every number* of the BEE JOURNAL without a single miss.

☞ **Great Premium** on page 125!

Keeping Comb Honey Ungranulated.

Written for the American Bee Journal

BY JOHN F. GATES.

I want to tell how I kept comb honey one year without granulating, it being better even than when first packed away. I simply kept it up chamber. Moth may sometimes get in it in summer, if not looked after once in awhile, though this seldom has happened with me. But I can keep it in such nice shape this way, that I don't worry any more about having granulated honey, and I mostly "hang on" to quite a quantity of my honey until spring, when it sells very quickly. The fall market is mostly spoiled by small lots of honey being rushed forward, and a most serious need has been to find a way to keep comb honey in good condition until these small lots have been disposed of.

I have had large quantities of honey almost ruined by turning watery, and candied, when I thought I had it in a good place on the first floor of my house. I have tried keeping honey in many places, and ways, but no place, so far, will keep it like the chamber of my dwelling-house, and as near the stove-pipe as I dare to put it. Will bee-keepers please try this up-stairs way of keeping comb honey, and report their success? If they try it, they will, I think, be sure to follow it, unless they have, or find, a better way, which if they do, please let us know through the AMERICAN BEE JOURNAL, for this question of keeping comb honey over, I am inclined to think, is one we will, in the near future, have to solve, or lose heavily on account of granulation.

It seems comb honey must not only be kept dry, but warm, especially in winter, and we seldom keep a fire all winter in any but our dwelling-house, though those who wish to keep over much honey and can't spare the room in their chamber, can warm their honey-house.

If I am not mistaken, it was Mr. D. A.

Jones who wrote of some persons keeping several sections of honey in their chamber a year in perfect condition. I had almost forgotten the item, until my experiment brought it to my mind. Was it you, Bro. Jones, who wrote that item? If so, please tell us more about it.

Many are asking what to do with candied comb honey, or if it can be liquified in the comb. The only thing that can be done with such honey is to melt it up and make extracted honey of it. This is done at a loss, of course, for extracted honey is the cheaper, and could have been produced cheaper than comb honey.

We can hardly imagine how much candied comb honey there is in the country each year. Will those who have candied comb honey tell us where they kept it, and at what time of the year it candied? And will those who can keep comb honey a year without having it candied, please tell us where they kept it, etc.?

Now will Prof. Cook tell us just what temperature is needed to keep comb honey one year in perfect condition?

Ovid, Pa.

The Renewing of Brood-Combs.

Written for the American Bee Journal

BY REV. S. ROESE.

It is a sad mistake for bee-keepers to allow brood-combs to remain in the hive year after year until they become as black as a stove-pipe, and the cells rounding instead of six-cornered, and dotted with holes here and there, caused by the bee-moth, which is too willing and ready to carry on its work of distruction in the hive, when a colony has dwindled down below its normal strength.

Brood-comb should be rejected and melted over, as soon as it becomes dark, and the walls of its cells thick, this thickness being caused by successive breeding in the same cell, each larva maturing leaving a thin coating in the cell; and every intelligent bee-keeper knows too well that every queen prefers, by far, bright combs for depositing her eggs, to those of dark, callous and thick cells; and it is also known that the worker-bees will fill older combs first with honey, and leave the newer and brighter combs for breeding.

The writer's experience has been such, that colonies which had their hives filled with old combs, were breeding very slowly, and on giving them a new comb of honey kept over from the previous season to stimulate breeding, it soon became emptied, and the honey transferred to older combs, and the new combs were filled with eggs in a short time.

Since the invention of the movable frame and comb foundation, this act of renewing combs is no longer a task, but a delight for the bee-keeper to see his discouraged colonies take a turn from bad to better, with new life and energy.

Herr Schoenfeld, a noted German bee-keeper, states in his experience, that renewing brood-combs becomes, with a vigilant bee-keeper, a matter of necessity, as workers matured in old combs are of much smaller size, and often deformed and weak; and contrary wise, bees matured in new combs, are of plump and healthy size, and are healthy and strong.

But the renewing of brood-combs must be done in the right time and season, so as not to endanger the prosperity and well-doing of the colony. It has been the writer's practice for years, in early spring, as soon as the temperature would admit an examination, to place in each strong and healthy colony one or two clean, new combs in which two or three patches of brood had been reared the year before; and the result has been a satisfactory one. And if this operation is repeated every spring, the danger of combs getting too old is avoided. Later on, at the time of the honey-flow, it is a good plan to place in each strong colony a frame having a full sheet of foundation, between the frames of hatching brood.

This renewing of combs should be done in the spring of the year, as such operations towards fall would greatly insure the winter preparations of the bees going on at that time of year in the hive. A word to the wise should be always sufficient.

Maiden Rock, Wis.

"Largest House-Apiary" Described.

BY W. Z. HUTCHINSON.

House-apiaries present several advantages over out-door establishments. Hives and supers may be of poorer and thinner lumber, and require no paint, as they are not exposed to the weather. There is no wading through the wet grass, nor working under a sweltering sun. The hives and implements are close together, enabling the operator to do more work with less tramping about. All trouble from robber-bees is entirely

done away with, as no bees can gain access to the interior except those of the colony that is being handled. Bees are more amicable when handled in-doors. They can be handled in rainy weather, or even in the night, if necessary. The work of protecting them for winter is greatly lessened, and artificial heat can be used if found desirable. If there comes a warm day in winter, the bees can enjoy a cleansing flight, which is not the case when wintered in the cellar. The protection enables them to build up in the spring much more rapidly; and, finally, everything can be kept under lock and key, safe from thieves and prowlers.

Exterior View of Mr. H. P. Langdon's House-Apiary.

What is admitted to be the largest house-apiary in the world, is owned by a friend of mine, H. P. Langdon, in northern New York, who took a great deal of pains to inform himself in regard to the advantages and disadvantages of other house-apiaries before building; and now, after two seasons' use, the only fault he finds with the building is that it is not one foot wider. This would give plenty of room for sorting and crating the honey in the house, instead of having a separate house for this work.

The building is 11 by 100 feet, and stands on a good stone wall, having ventilating openings on each side. The sills are 2 pieces of 2 by 4; the lower joists are 2 by 8, 2 feet apart from center to center, and the same distance as the studding. The floor is double, of ⅞ lumber, planed, with a strip of sheet-iron between the layers next to the wall and around the studding, to prevent mice from gnawing up though.

A platform 12 inches high, and the width of a hive extends lengthwise of the building in the center of the room, except that a space of 8 feet is left at each end, and a space of 6 feet in the middle. This platform is for holding extra hives, supers, etc., that the alley on each side may be left clear. The studding is 2 by 4, and of such a length as to make the top of the plate—2 by 4, two pieces—come 8½ feet above the floor, and the upper joists, 1⅛ by 8, are nailed across the rafters one foot above the top of the plate, thus making the room 9½ in the clear.

The roof has the common pitch, and is well shingled. A few braces are put in to keep the building from shaking in high winds. The boarding is a second quality of spruce, made shiplap, and put on horizontally.

On the floor at each side of the house, is a platform the whole length of the

room, 3 inches high and 3 inches wider than the length of a hive. This platform is permanently stuffed with planer shavings. A plain hive with square corners and flat top is used. The hives stand on this platform, flush with the inside edge of the studding sidewise to the wall, 2 feet from center to center, thus bringing the ends only 3¾ inches apart. The entrance to each hive passes through the outside boarding nearly on a level with the floor, then rises on a slant to the top of the platform, and opens into the hive 4 inches from its outer side. This leaves a space for dead bees to accumulate, so that no rim is needed under the hive in winter.

Over the space between the hive and the wall, level with the bottom of the hive, is a loose cover with an inch hole in it. Then over this, nearly to the top of the hive, is another cover, resting on cleats on the studding. This forms a sort of box 4 by 22, and 9 inches deep, between the hive and the wall, and makes a very convenient place to get rid of bees that must be shaken off the covers, combs and other things. By tipping this upper cover back against the wall, shaking in the bees, dropping the cover in place, and letting them down through the inch hole and up into the hive at their leisure, one troublesome feature of most house-apiaries is avoided. These platforms provide for 100 hives. Above these platforms, 4½ feet from the floor, is a shelf, formed by nailing an arm of inch stuff on each side of each studding, with a brace, 2 by 4 by 24, nailed between them and their outer ends, and spiked on the edge of the studding below. These brackets are floored over exactly like the lower platform, entrances and all, and packed for winter in the same way.

The windows consist of one light, 14 by 20, with the sash set into the wall without casings, and screwed to a cleat on each side, that is nailed inside the boarding. There is a window in front of every third hive. A hole is bored through the top sash close to the edge of the glass, and around each opening the wood is cut away inside, to lead out all bees that fly to the window. Just above the level of the cover of each hive is a 2-inch hole bored through the wall, with a wire cone in each. These are the bee-escapes proper of the house. All windows, except the one nearest the

Interior View of Mr. H. P. Langdon's House-Apiary.

hive being manipulated, are curtained quite dark, otherwise the bees do not leave the room well. Upward ventilation is obtained by three shafts, 8 by 10, through the ceiling and roof, into a cowl over each on the roof. Both these and the openings below can be closed in the winter. The draft is so strong most of the time that it will draw up a piece of paper, consequently no trouble is experienced by reason of smoke in the room.

The outside walls are painted in five different colors, of as great a contrast as could be made, 6 feet of each color in rotation. This brings a window of each upper and lower into the center of each color, also three entrances to each color, and works admirably in helping the bees to locate their hives. Each entrance has an alighting-board of the same color as the wall above.

For wintering, a cleat 5½ feet long is screwed to the edge of the platform and shelf, with a wide board running lengthwise on the inside. This makes four troughs 100 feet long, with 50 hives standing in each. Planer shavings are then packed around the hives, both sides and ends, and over the top, and the bees are ready for winter.

[The foregoing article was written for the *American Agriculturist*, of New York, in which paper it appeared some time ago. We are also indebted to the same periodical for their kindness in furnishing us the engravings which help so much to get a clear idea of Mr. Langdon's famous house-apiary.—EDITOR.]

How Shall We Winter Our Bees?

Written for the American Bee Journal

BY J. E. POND.

I am led to ask the above question, by the actual results of the last four years, with two colonies of bees that came within my immediate observation. These two colonies are hived in ordinary 1½-story Langstroth hives, the lower stories being used as brood-chambers, the half stories being used for surplus, they having had no protection whatever, save what is given by putting them on the south side of an out-building.

During all those four years, these bees have been in no wise opened or disturbed; they have sent out swarm after swarm, that have gone where they pleased, and this very year, on June 3rd, one of them sent out a large swarm, and then another on June 16th. The other sent out a swarm in the latter part of May, and another on June 12th, and to-day both hives are filled with bees.

The hives are made of ⅝-inch thick lumber. The seasons have varied, of course, but during each of these four years, the temperature has been as low as 12° to 15° Fahr. below zero.

Now does the above statement prove anything, or not? To my mind it proves just this, viz.: That these two colonies have wintered and thrived with absolutely no protection. We have been taught that we can foretell the future by past experience. This, to a certain—yes, to a very large—extent is true; and from the statement given above, I deduce a theory, and that is, that bees need no particular protection to cause them to winter safely; and further, that no rule for wintering has yet been given that can be said to be absolutely safe.

As I have stated many times in the past, I have always wintered my bees on the summer stands; the loss has been extremely small, and I have found it no less in colonies supposed to be well protected, than in those that were allowed "to go as they please."

The above is not written argumentatively, but is merely a matter of my own experience.

North Attleboro, Mass., June 23.

The Bee—Facts and Fancies.

Read at One of the Regular Meetings,

BY "GOOD TEMPLAR."

What's a bee? A bee is not a mineral, nor yet a vegetable. Then, of course, it must be an animal. It is a very small animal, being only about ⅝ of an inch long, yet at times a boy or a girl will think it nearly as big as an elephant. A man weighing over 200 pounds once said to me that he would rather meet a bear any time than a bee that was coming toward him wrong end ahead!

Then, a bee is an insect. An insect is an animal divided into three distinct parts, has six legs and four wings, says Webster; yet many will tell us that the bee has two wings and four legs, and is whole, instead of being divided. Wonder which is right, Webster, or "I told you so."

Again, Webster says that bees breathe air in tubes by spiracles. Others tell us

that they have noses to breathe through, and don't go on church spires at all to do their breathing. Well, I never saw a bee on a church spire a-breathing, but I guess Webster is right about their not having noses.

Once more: Webster says that an insect is an articulate animal, whose body is divided by cross-lines or incisions, into a number of segments or rings, but he forgot to say that a bee when in just the right position would make a person articulate things which he would not say in his sober moments? The writer of this has so articulated many times, and yet, when asked in the Lodge if he has violated his obligation, he concludes he was sober enough after all, so he says he has not.

Then, bees gather honey from the flowers. A man asked me one day if the bees had made any honey yet. Just as though the bee was a confectioner, and could *make* honey at any time! No, bees do not make honey, but they do cell it, and strange to say they keep all they cell.

Again, a bee can sing; and when a bee really sings for all it is worth, it always has at least one interested listener. This singing seems the most important always when it sings in a person's hair. Let a bee once commence a tune in the hair, and the person is all attention at once. First, the person listens, then gesticulates a wonderful applause! Next, listens again to see if he is to have more music, and on hearing it again the gesticulations are greater than before, and some complimentary words put in! But there is usually an end to this singing, the same as to all other things, but this ends more pointedly.

A young lady was once at my house, and one of the bees came and sung in her hair. She had never heard such music before. The applause which she gave was very affecting. When asked what was the matter, she was so affected just at that moment that she said, "There is a bun-h-y h-e-e-e in my hair!"

But the hired man gave the most astonishing results when one sung for him. The first we knew that one was singing for him, was a sudden leap into the air, and a tremendous clawing at the head; then he bounded off around the house like a deer, expressing his approval at every bound by yelling, "Kill him! Kill him!" Three times around the house he went in this way, and when partly around the fourth time he was heard to say almost in a groan, "Kill hi-m-m!" stopping short and turning very red in the face. We knew then how deeply he had been impressed.

But I am reminded that my time is up, so I will stop short.

GOOD TEMPLAR.

Introducing Shipped Queens.

Written for the American Bee Journal

BY H. G. QUIRIN.

I see in an article on page 823 of the AMERICAN BEE JOURNAL, a possible explanation of the difference in opinions between different queen-breeders, as regards the injury done to queens during shipment. Now, no doubt, there is something of the kind—that queens are injured while being shipped long distances—but hardly, if ever, are they injured when confined but a few days. I wonder whether Doolittle, and others who think queens have been injured through shipment, are certain that these queens which came under ther notice as being impaired in general hardiness and laying qualities, were not injured while being introduced, as it is a well-known fact, that by most of the methods of introducing, queens are sometimes balled, and such queens are usually injured more or less. I will cite a few cases in which I might have laid the cause of injury to shipping.

Last season, while introducing some queens to colonies, I found, on examining them, that one of these queens was being balled, and was nearly dead, whereupon the queen was given back where I had taken her from, and in four days afterwards was successfully introduced to the bees which had balled her. Now this queen kept ten Langstroth frames crowded with brood before introducing her, while after she was introduced she hardly filled four frames; the bees superseding her five weeks afterwards. You see, this queen was not confined five minutes of her life.

Another case was where I united some colonies, the queen also being balled. This queen acted exactly like queen No. 1.

Does it not appear plain that had I received the above queens from abroad, and not knowing they were balled, to lay the cause of injury to shipping? Isn't it reasonable to believe that a queen has the power to discharge the accumulated egg-material, which is supposed to do the injury? or to use it to nourish her in place of honey?

It is well known that when a colony is robbed, and the bees are left to starve, or in almost any other case of starvation, the queen usually holds out the longest, being numbered among the last to die. Is it not reasonable to believe that the queen uses the egg-material to subsist on? And if she does so in a case of starvation, does she not do so when caged, and has no other use for such egg-material?

It is a well-known fact among poultrymen, that hens laying prolifically, when suddenly stopped laying, the embryo eggs already formed will never be laid, but will go towards the nourishment of the body; but these same hens will, when circumstances are favorable, lay afterwards just as prolifically as ever. Of course, the anatomy of a queen-bee no doubt is somewhat different from a hen, yet I think that a queen has the power to take care of that egg-material without injury to herself.

Bellevue, Ohio.

Italian Bees—Something Historical.

Written for the American Bee Journal

BY C. J. ROBINSON.

On page 623 of the BEE JOURNAL for May 17th, the readers are informed by M. M. Baldridge that "certain statements have appeared in the AMERICAN BEE JOURNAL that were said to be historical facts; but, on close inspection, they did not prove to be." The readers' attention is not called to any certain "statements" that "did not prove to be" facts. Until Mr. B. shows that "from time to time certain statements have appeared in the 'Old Reliable'" that were incorrect, his accusation may be taken for naught, prompted by unworthy critics.

Following Mr. B.'s accusation in general, he proceeds to "prove" certain of my "statements" wilfully false, because I differ from his version of what occurred—facts in the history of the earliest importation of Italian bees. Mr. B. says that I "insinuated that Mr. Parsons was dishonest." *Dishonest* only expresses a faint idea of the case when the facts are known, and as he calls on me "to explain," I am glad of the occasion to "prove" by the records the dishonesty of Mr. Parsons, and the record which I put in evidence involves Mr. M. M. Baldridge with Parsons. Facts are justifiable whenever a controversy is at issue, so I will make plain the meaning I wish to convey.

The facts in the case brought in issue by Mr. Baldridge are as follows:

In 1859, Mr. S. B. Parsons, of Flushing, N. Y., a nurseryman and self-styled botanist, obtained a commission from the Chief of the Patent Office, then having the supervision of the Department of Agriculture, to travel in Europe and purchase cuttings and plants for testing in this country. While he was on his mission, the Chief transmitted an order to Parsons, directing to purchase colonies of bees in Italy, and forward them to the Department. He made his official report to the Chief, which was printed in the Annual Report of the Department to Congress—see the Official Report for 1859, page 543, wherein Parsons reports among other matters that in pursuance of the said order, he purchased ten colonies of Italian bees for the Government, and ten colonies for himself.

What became of the ten colonies purchased for the Government by Agent Parsons? The sequel is a matter of record. Mr. Parsons reported that he contracted with a Mr. Hermann (a German) to purchase the bees in Italy and transport them in original hives to America, but Hermann sent an Austrian by the name of Bodmer in charge of the bees. In May, 1860, Mr. Langstroth said the bees landed at New York the 18th of April, 1860, but this has, "on close inspection," been found not to be facts.

Prof. C. V. Riley, on page 208 of the AMERICAN BEE JOURNAL for Feb. 16, 1893, mentions that the bees arrived in May, and he quoted from the Government records. But Mr. Riley was in error in saying that the "Department succeeded where private enterprise had failed." The history shows that the Department failed where private transaction succeeded. How about the failure and the success? Mr. Baldridge implicitly says I am not reliable—"not willing to stand corrected"—wholly unlike himself—so I quote Mr. Langstroth to "prove" my items of history. Mr. L. recorded (see AMERICAN BEE JOURNAL for March 16, 1881, page 82), from which same page Mr. B. quotes a paragraph:

"I was called to Flushing, N. Y., by Mr. Parsons, to visit him and advise with him as to the best way of managing his Italian bees.....On arriving at Flushing, Mr. Parsons showed me five hollow logs or 'gums' placed in an old bee-shed," etc.

Mr. Langstroth fixes the date of his

"visit" in the "spring of 1856." It is well known that not until 1860 were any bees imported direct from Italy. Mr. L. details in his story of that visit thus:

"On the 19th of April (1856, he says), as soon as the bees were allowed to be landed, they were carried to Flushing. The small boxes in which they were put up, were in three different packages, one of which was consigned to the United States Government (I call attention to the fact that this mention of the United States Government in connection with Italian bees is the first and only mention Mr. L. has put on record. He has ignored the Government, and aimed to credit Parsons with the whole honor of being the first importer of Italian bees from Italy—a private enterprise, according to his version); one to Mr. Mahan and one to Mr. Parsons .....and I can assure Mr. Robinson that every colony consigned to the Government and Mr. Mahan, was dead (?)."

Mr. Mahan never ordered bees from Italy—he would not have ordered bees through Parsons, and no bees were "consigned to Mr. Mahan." If bees had been consigned to Mr. Mahan, of Philadelphia, they ought not, and would not have been taken to Flushing to be examined by Parsons and Langstroth, for it is well known that Mahan was more of an expert bee-man than Langstroth, and as mentioned by Mr. L. on page 82: "On my way (to Flushing) I called upon Mr. Mahan, who was joint owner of a large interest in my patent hive." Thus it will be seen that Mahan was interested with Mr. Langstroth, and was, at least, his peer.

It is history, recorded by Mr. L., that he was invited by Parsons to visit him and advise as to the best way of managing his Italian bees. Parsons had received bees from Italy. Mr. L. goes to Flushing and meets Parsons, who "showed him five hollow logs or gums. I saw only an occasional bee flying out from one of the hives. These colonies had been purchased in Italy. Four of these died at Flushing. The fifth contained a mere handful of bees, with their queen, which I introduced to a colony of black bees." Now, as his story runs, while on the same visit, he goes on and describes the incidents of the importing of the bees consigned to the Government, Mahan and Parsons.

As Mr. L. records the incidents, he was first shown the log hives direct from Italy, and he makes the date the spring of 1856; then he must have been shown the small boxes put up in three packages, as he says, one for the Government, etc. He does not explain how it came to pass that Parsons and himself assumed possession of the packages consigned to the Government—no package was consigned to Mr. P. J. Mahan. But Mr. L. records: "A few, only, of those marked for Mr. Parsons (?) had living queens, some of which soon died, and in a short time he found himself the possessor of only two queens, one of which was the queen found alive on my arrival at Flushing." Mark, Mr. L. finds one Italian queen in the hollow log, and one in the package consigned to Parsons, and he treats the consignments as one shipment. No reader can reconcile the statements made as history by Mr. L. in his criticism of the history recorded by me.

Mr. L. recorded: "One of the queens (the two he saved) was intrusted to the care of Mr. Wm. W. Cary, of Colerain, Mass., on the premises of Parsons, and the other to Mr. Bodmer (who came over with the bees), some distance away." Please note: In the spring of 1860 Mr. Parsons has two Italian queens. In the spring of 1861 Mr. Parsons inserts an advertisement in the AMERICAN BEE JOURNAL, which reads thus—I here transcribe *verbatim*:

"Orders will now be received for these bees, to be delivered in the spring (1861). A circular will be sent to all applicants inclosing a stamp. In it will be found the terms, and also reports from Mr. Langstroth, Dr. Kirtland, Mr. Bracket, Mr. *Baldridge* (the man who wrote the criticism on page 623, reflecting on me), and others, testifying fully, from *actual observation* (?) to the great superiority of this race of bees over the common bee."

The record shows that the said critic certified to the "great superiority" of Italian bees from "actual observation." How could either of the parties have had actual observation as to a comparison of the two races of bees when the facts were that neither man had an opportunity to see a working colony of Italian bees? Bear in mind, only two queens near New York in the season of 1860; in the forepart of the year 1861, a period of five-months' bee-season, Langstroth (I doubt his being guilty), Kirtland and Baldridge [of the far West], certify [to favor Mr. P.] that they have actually observed the habits, propensities, breeding qualities, working as honey-gatherers, comb builders, wintering, hardiness, etc. Every practical bee-keeper knows, when informed of the facts in the case, that those whose

names appear in Parsons' advertisement, if *bona fide*, were incompetent witnesses, and language can't express condemnation deserved by the author of said advertisement. It is an item of history, important for all time.

One other item of history in the case is recorded by Mr. Langstroth in his criticisms of my "statements." He says:

"The bees sent to Mr. Parsons [the bees in the three packages] were in cigar-boxes into which the combs were merely crowded or wedged; the loosening of the combs on so rough a voyage killed some of the queens, while others were drowned, with their bees, in honey; and others still, starved from the boxes being overcrowded with bees."

From this the reader will learn that the bees Parsons, as employe of our Government [champion for honesty, if Mr. Baldridge backs him], failed to perform his duty that was entrusted to him in the capacity of an obligated official bound by law or conscience. Every beeman knows that bees could not be expected to survive a passage from Genoa, Italy, to New York while packed in cigar-boxes as described by Mr. Langstroth.

Mr. Baldridge takes issue with my statement that—as he erroneously quotes me—the United States Government paid about $1,800 for importing Italian bees, and got nothing in return. I challenge him to refer to any record showing that I have made such positive statement. It is a matter of recorded history that the United States Government attempted to import bees from Italy; that S. B. Parsons bought, as agent, ten colonies of bees in Italy, and ordered the bees sent to America. This incurred expense—by whom was it paid, and how great a sum? Mr. Mahan endeavored to learn the amount of the expense of the importation. He told me he was informed that the aggregate sum of the vouchers presented by agent Parsons amounted to $1,800.

I then inquired, by letter, of the Chief of the Department, concerning the expenses, mentioning that it was reported that $1,800 was the sum paid by the Department. The official evaded the question, but mentioned that "it did not near the amount you named." I regret that I did not keep the letter. Surely, the Government officials paid more or less money on the vouchers presented for services and disbursements. What was the sum total? The records in the archives of the Department will afford the desired information, unless Mr. Baldridge "happens" to impeach the record by stating, at this late day, what he "happens to know of the main facts."

Mr. Langstroth recorded that, "The result of Mr. Parsons' dealings with Mr. Hermann [who was sub-agent of the Department, made such by Parsons by reason of a contract to deliver the bees as per order] was that for $1,200 advanced to him, he [Parsons] had only two queens to show. The $1,200 paid to Hermann, as Mr. L. said and probably believed, was money out of the United States Treasury as shown by the indisputable history of the case.

Mr. Baldridge calls on me to explain, and thus relieve him of the pain caused by his being racked with the "impression" he felt when reading my "statements" relating to Parsons, whose announcement he [Baldridge] certified to. He says: "But let me warn you in advance, to be very careful what you say in reply, for I happen [luckily] to know what the main facts are and were [?]." His threat implies that he aimed to have the readers understand that I do not hesitate to record false "statements" unless he does "warn" me of his flaming sword.

He says I am "one of the oldest writers on bee-culture now living in the United States." Yes, I am the junior of Mr. Langstroth in age, but read about and handled bees before Mr. L. appeared on the stage, and I challenge any reader to point to any incorrect "statement" recorded by me; nor have I bred queens for sale, or falsely certified to deceive readers—I have only tried to inform and benefit readers—*Pro bono publico.*

If permitted, in a further "reply," I will show P. J. Mahan was, indeed, the first who imported, and the first who bred and sold, Italian queens.

Richford, N. Y.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of this number of the BEE JOURNAL for description and prices.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees are Booming.

We are having the best honey-flow that we have had for years. The alfalfa is furnishing more nectar than I ever knew it to yield before. Bees wintered fairly well last winter. I have 65 colonies now. There is about 25 acres of alfalfa left for seed, all within one mile of my bees. C. C. ZINN.

New Windsor, Colo., July 15.

Tansy Leaves Drive Ants Away.

I see from the BEE JOURNAL and other sources, complaints about ants troubling bees. I saw a statement in the New York *Voice*, that "tansy leaves will drive away ants." I laid the leaves between the cloth and hive-cover, close about the ant-nest, and on all trials in 24 hours all traces of the ant-pests were gone. It has never failed with me.

Marion, Ind. JOHN RATLIFF.

Unfavorable Year for Bees.

This year my bees are far behind, as I have not taken or sold one pound of honey yet. I have looked over the bees, and find some honey that will do to take in a week or two. Last year and year before were bad honey years in this locality, but this year is the worst I have seen since I have kept bees. The March freeze, the May snow, and the dry weather at present, have played havoc with the honey crop in this locality. J. M. PRATT.

Todd's Point, Ky., July 9.

Buffalo Co., Nebr., Convention.

Five or six of our bee-keepers invited all the bee-keepers of Buffalo county to meet on June 25th, in the City Hall at Kearney, at 2 p.m. At the appointed time there were present: A. Stedwell, Phil Brady, A. J. Scott, J. C. Knoll, Frank Higgins, Wm. Travilpiece, B. O. Getchell, A. W. Smith, J. W. Shahan, and J. C. Pierce.

A. Stedwell was elected temporary Chairman, and J. W. Shahan Secretary.

It was decided that we proceed to organize a bee-keepers' association, and that the association be called the "Buffalo County Bee-Keepers' Association." A Constitution and By-Laws were then adopted. And annual dues were fixed at 50 cents per annum, and officers were elected as follows:

President, A. Stedwell; Vice-President, Wm. Travilpiece; Secretary, J. C. Knoll; and Treasurer, A. W. Smith.

It was decided we hold a special meeting on the last Saturday of each month, at 2.m. The next meeting will be held at Kearney, in the City Hall, on the last Saturday in July. The place of each successive meeting is to be determined then.

Information was wanted by Mr. Scott, on how to prevent bees from robbing. Several of those present replied.

The ten members represented 72 colonies. J. C. KNOLL, *Sec.*

Glenwood Park, Nebr., June 26.

Too Dry for the Bees.

We are having a poor honey year here, having had no rain to speak of for about two months. Bees are making a living, but hardly anything more. The hives are full of bees and brood. We have had no swarming yet. I am hoping they will not venture, as it is so dry. We are hoping to get rain soon; if we do, we will have a big fall flow. A bad beginning sometimes makes a good ending. So we live in hopes that better things are in store for us.

N. E. FEAKINS.

New Richmond, Wis., July 14.

Rainy and Cold Season.

I like to look over the reports published in the BEE JOURNAL from different sections of the country; in fact, I like to read all there is in it, and do if I have time. The prospect of even an average crop of good, marketable honey is not favorable, at least I know it is not so in my case. Bees had been doing well from about the middle of April to the 18th of May, and the hives were filled with brood, and a fair supply of honey; especially was this the case with all good colonies.

On May 18th it commenced with

showers, and finally set in for a steady rain, which lasted until the 25th, and even rained some that day, but as some of my colonies were ready to swarm, and as the sun broke through the clouds, out they came, and the next day two more swarmed, and still the 27th two more. Then a steady cold rain commenced, and lasted six days, and even then when it stopped raining, the bees swarmed, with not even one pound of honey in the hive, but all other preparations were complete.

May 25th is as early as I have ever had a swarm here, and only in one instance have I ever had a swarm earlier than the above—that was the 20th of May, when I was in Oswego county. I have resided here (Allegany county) 37 years, and in fact I have had bees every year since my 9th birthday, when my father gave me my first colony—about 58 years ago. But all this time I have had other business.

During this long term with the bees I have learned many pleasing and interesting lessons. I have always, from the commencement, taken an interest in bees and their various operations, and claim to have been a close observer of their natures and habits. I can read a colony of bees as one would a book. All I know about bees and their management I have learned from practice and experience, although having read a great deal in the bee-papers, of which I am very fond.

This season I have learned something new in relation to bees and honey. The main supply of honey, so far, is from white daisies. I have a good sample, yellow enough. If it were not for this source, bees would be in bad condition.

H. F. NEWTON.

Whitney's Crossing, N. Y., July 9.

Too Dry and Too Cold for Clover.

Bees have been a failure in this part of the State for six years, but I am still interested in them. I have 25 good colonies of the best bees Illinois can furnish, but I had only two swarms in May. Dry weather last fall, and cold in March, killed all the white clover, so this year will be a failure again. So it gives me an easy time—nothing to do—nothing to buy, and nothing to sell—only waiting for better times. Honey brings a good price—25 cents a pound—so it is a good chance for the Wiley men to make some money out of their manufactured comb honey!

D. R. ROSEBROUGH.

Casey, Ill., July 12.

Quantity, Not Quality.

In my article on page 20 is a mistake which I wish to have corrected. I am made to say, "Our country does not come up to some others in *quality*, etc." It should have been *quantity*, for I do not think any section of country can "lay us in the shade" this year on "quality." It is "quantity" that we are short on. It is about 20 to 25 pounds, with good average colonies so far this year.

I want to make the above correction in justice to our Mississippi honey, for some Northern people might want an extra fine article sometime, and would not send to Mississippi for it likely, with my former article to judge from.

W. T. LEWIS.

Lewisburgh, Miss., July 10.

Convention Notices.

CALIFORNIA.—An extra session of the Central California Bee-Keepers' Association will be held in Hanford, Kings Co., on August 1, 1894. J. F. FLORY, Sec.
Lemoore, Calif.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

ILLINOIS.—The summer meeting of the Northern Illinois Bee-Keepers' Association will be held at the residence of William Farnham, 4 miles southwest of Rockford, Ill., on August 21, 1894. B. KENNEDY, Sec.
New Milford, Ill.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

TENNESSEE.—The next annual meeting of the East Tennessee, Bee-Keepers' Association will be held at Whitesburg, Tenn., beginning on Thursday, August 16, 1894. All members and other interested in bee-culture are invited to attend. H. F. COLEMAN, Sec.
Sneedville, Tenn.

THE NORTH AMERICAN B.-K. A.—The Quarter Centennial Meeting of this Society will be held at St. Joseph, Mo., on Oct. 16, 17 and 18, 1894. It is the first convention of the North American Association beyond the western bank of the Mississippi, and large delegations from the great West will be present. We hope the East, the North and the South will gather with them. FRANK BENTON, Sec.
Dept. Agriculture, Washington, D. C.

NEBRASKA.—The next meeting of the Nebraska State Bee-Keepers' Association will be held at Lincoln, Neb., on the evenings of Sept. 11th, 12th and 13th, 1894, at the Honey Hall on the State Fair grounds, and in connection with the Bee and Honey Exhibit at the State Fair. An invitation is extended to every reader of the AMERICAN BEE JOURNAL to be present and sample the good things presented.
York, Neb. L. D. STILSON, Sec.

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OLDEST BEE-PAPER IN AMERICA

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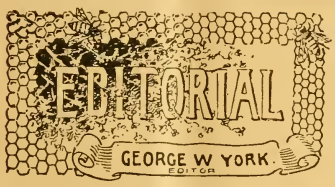


Rev. W. Anderson, of Imlay City, Mich., made us a very pleasant call last week. He has 35 colonies of bees, and has some honey this year, taken from basswood bloom. Bro. Anderson evidently finds that bee-keeping and the preaching of Congregational gospel go well together.

An Australian Letter will be found this week on page 146, written by Mr. Edward Rye, proprietor of the Wingham, N. S. W., *Chronicle*. Mr. Rye is a beginner in bee-keeping, but writes very entertainingly of his apiarian experience, and of the prospects for bee-keeping in his country. We are always glad to hear from far-away Australia, and the progress being made there with modern apicultural methods.

Bro. Thomas G. Newman we called on a week ago last Saturday, and found him suffering from a severe cold, which, on top of the exhausting attacks of la grippe he has had, just about "used him up." He reported a fair trade in bee-supplies up to the time of the railroad strike, which stopped everything. But the past two weeks all has gone on again about as usual, and he is filling orders with his accustomed promptness.

Mating of Queens.—Dr. F. L. Peiro, who conducts "Our Doctor's Hints" in the BEE JOURNAL, handed us this item recently, which he translated from *L'Apicoltore*, an Italian bee-paper:

The *Bienenzeitung* has gathered statistics regarding the marital excursions of queens, and learns that fecundation seldom if ever occurs until after her third flight—usually later. The time required for impregnation varies from 10 to 35 minutes.

The Bee-Keepers' Review for July came very nearly being an August number. It was all caused by the railroad strike, Bro. Hutchinson says, as he had "to wait nearly three weeks for paper."

"Bee-Line" Newly Defined.—In a district school the pupils were asked to define a bee-line. A small boy answered: "I know it: It's the line a feller makes for home when a bee's stung him." Probably he had in mind an experience all his own, and so *knew* what he was talking about.

Round-Up in the Apiary.—Mrs. L. Harrison, writing in the *Orange Judd Farmer* the past month, had this to say:

It is a good time now to have a round-up in the apiary preparatory to a fall flow of honey. Where colonies have been allowed to swarm at their own pleasure, there may be parent colonies which have swarmed to death; that is, until they have too few bees to pass the coming winter in safety. Small after-swarms or casts may also be found, which have only a small amount of comb. If these were returned to the parent colony before the fall flow of honey, they may be able to secure enough stores for cold weather.

In my apiary there has not been a single after-swarm this season, and but few first

swarms. In my experience with Italian bees, I have had but few second swarms, and believe that they are far more provident than the common bees, for the little swarms that flit from tree to tree late in the season are usually black bees.

At the present writing (July 7th) strong colonies are little more than making a living, and the prospect for a fall flow is quite encouraging, as there have been abundant showers. Polygonum (smartweed), which grows in corn and potato fields, is now making its appearance. Spanish-needle and beggar-ticks, which grow luxuriantly upon overflowed lands and along water-courses, yield much honey in the fall.

Winters in the Cellar.—We notice by one of the late bee-papers, that a poor fellow down in Ohio "winters in the cellar." Now that's a bad place for a man to winter in, and, besides, it's time enough for people to stay under ground after they're dead, and not before. We feel sorry for the man who has to "winter in the cellar." But it may have meant that he *winters his bees in the cellar*, though it didn't say so. It's quite an art to be able always to say what you mean, isn't it?

The Nebraska State Fair will be held at Lincoln on Sept. 7th to 14th this year. A specially liberal premium list has been prepared for the apiarian department, of which Bro. E. Whitcomb, of Friend, Nebr., is the Superintendent. The conditions and list of premiums offered are as follows:

LOT I.—Bees and Honey.

[Points for the Judgment of Honey.]

Comb Honey—1st, Perfection of capping; 2nd, Evenness of surface; 3rd, Whiteness of capping; 4th, General appearance as to marketability.

Extracted Honey—1st, Cleanliness; 2nd, Clearness; 3rd, Flavor.

	1st.	2nd.
Best comb basswood or white clover honey, not less than 20 lbs., crated and in single comb sections, weighing not more than 2 lbs. each	$10 00	$5 00
Best comb fall honey not less than 20 lbs., crated and in single-comb sections, weighing not more than 2 lbs. each	10 00	
Best gallon of extracted white clover or basswood honey	5 00	3 00
Best gallon extracted fall honey	5 00	3 00

The above is limited to competitors producing their own honey in Nebraska during the year 1894.

Best 20 lbs. granulated honey	$5 00	$3 00
Best and largest display of any one, including bees, extracted and comb honey, and apiary supplies	15 00	10 00
Best exhibit in beeswax	10 00	5 00
Best exhibit in apiarian supplies and implements	15 00	10 00
Best display of honey in marketable shape	15 00	10 00
Best display honey-candy, honey-sugar, and sweets by any one, in which honey is made to fill the place of sugar	5 00	3 00
Best honey-vinegar, not less than ½ gallon	3 00	2 00
Best display of bees and queens in observatory hives, and not allowed to fly	10 00	5 00
Best exhibition of extracted honey, to be exhibited on the grounds under the direction of the Superintendent, not later than Thursday of the Fair	10 00	5 00
Best honey extractor, test to be made by actual extracting upon the ground	5 00	3 00
Best all-purpose single-walled hive	2 00	1 00
Best all-purpose chaff hive	2 00	1 00
Best bee-smoker	1 00	50

The following is confined to exhibitors in Nebraska alone:

	1st.	2d.	3d.
Best display of apiarian implements and supplies, including comb foundation, same full to partly drawn, and queens and bees in cages	$10	$5	$
Best report of surplus honey stored by any colony of bees during the year 1894, the amount of stores, manner of building up, handling, kind of hives used, and kind and quality stored, to be verified by owner, entries to conform with other entries of this class, and report with verification to be filed with Superintendent not later than noon on Thursday of the Fair	15	10	5

LOT II.—County Collective Exhibits.

	1st.	2d.
The county in Nebraska showing the best collection of honey of all kinds, any or all ages, shapes and conditions	$25	$15

The exhibits must have been produced in the county exhibiting. Individuals composing this collective exhibit may compete for any or all minor premiums offered.

LOT III.—Honey-Producing Plants.

	1st.	2d.
For the best collection of honey-producing plants	$10	$5

Certainly, the foregoing generous list of premiums will call out a large exhibit.

Nebraska bee-keepers "know how." Bro. Whitcomb, no doubt, could give a good many "pointers" on how to secure the proper recognition of apiculture at Fairs.

The Color in Beeswax.—Dr. C. C. Miller, in a recent number of *Gleanings*, gives the following "straw" on the color of beeswax:

"Who of us hasn't wondered what it is that gives the bright-yellow color to beeswax? Wax is generally considered white when first produced in little scales. Cowan says it is always tinted, the color coming from the pollen consumed. But what makes it get yellower in the hive? A German writer says that, like the young of nearly all animals, the young bee, on first emptying its bowels, discharges feces of intense yellow, and this colors the comb. White comb confined in the center of a colony, but inclosed in wire cloth, remains white. Here's something for experimenter Taylor."

Feeding to Cure Paralysis.—Prof. Cook, writing from Claremont, Calif., on July 23, 1894, offers the following as his experience in treating bees afflicted with paralysis:

DEAR MR. YORK:—As you are aware, I secured several of the diseased colonies of bees. All were very scant of stores. I fed all, and all are much improved. Indeed, I see no sign of the disease now. As simple feeding seemed as effective as medication with feeding, I am persuaded that feeding was enough to rout the disease.

I was led to the opinion that it was a case of partial starvation. The nurse-bees could not properly feed the brood, and the latter died from lack of nourishment. Mr. J. C. Dayton writes me that he thinks starvation is the cause.

This past week I have examined colonies with much last year's honey, and find no trace of the malady. Commissioner Herron informed me that the disease was not east of Grapeland. I wonder if the bees there have not more old honey on hand.

Rambler was going to buy (?) that $1,000 recipe, but lacked a few cents of having enough. I will sell him my *secret*—just feeding—for just what he has on hand!

I find many plant and bark lice here this dry season, and so there is very much honey-dew. This may make it necessary to feed less. A. J. COOK.

California Black-Sage Honey.—Mr. J. P. Israel, of Escondido, Calif., had an article in a recent number of *Gleanings*, on the production of comb and extracted honey in California, and also touched on the subject of bees and fruit. We take the following excerpt from Mr. Isreal's article

A producer in a black-sage country should by all means produce comb honey, provided he does not have too far to haul it in a wagon. He should do this, because all the black-sage honey is *white*. Where his flora is mixed he can get no pure white honey, therefore he should extract.

Prof. Cook is going to be a power for good in California. Already he has begun te establish an influence over the fruit-producers. But fruit-men are getting their eyes opened—opened by sad experience. Negotiations are now going on in a certain section of Fresno county, to plant 1,000 acres of black-sage. This will be done by a company, or combination, of large fruit-producers. This sage will be scattered along the foothills—about 100 acres in a patch—five miles apart. Thus you see its benefits will reach a great many orchards, which in turn will pay back in nectar for the labor of the bees. These tracts of black-sage will be irrigated, and will yield floods of honey every year.

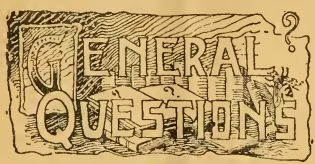
The Premium List of the Kent Co., (Mich.) Agricultural Society for 1894 has been sent us. The Fair is to be held at Grand Rapids on Sept. 18th to 21st inclusive. The premiums on "Apiary Products" are as follows:

	1st.	2nd.
Display of comb honey	$3 00	$2 00
Single case of comb honey	2 00	1 00
Display of extracted honey	2 00	1 00
Collection of honey-producing plants, mounted and named	2 00	1 00
Display of bee-keepers' supplies by manufacturer	Diploma.	

While the above is a good beninning, another year bee-keepers around Grand Rapids should see to it that a more extensive list is offered. With proper effort on the part of apiarists, we believe that every Fair in the country would grant liberal premiums for bee and honey exhibits. The apiarian department should be made one of the most attractive parts of every Fair. By a little work it can be done, and it's a good way to advertise the bee-keeping business.

Mrs. Atchley is again up with her orders, and queens go by return mail, her bees having recovered from the effects of the severe sun-scorching they received a few weeks ago.

Great Premium on page 131!



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Transferring and Italianizing.

1. I have four colonies of bees in Langstroth hives with loose frames, which I wish to transfer to dovetailed hives and Hoffman frames, and I also wish to Italianize them, as they are now blacks. Will it be best to Italianize now, and transfer next spring, or do both at once next spring?

2. Is there any way to Italianize without having to hunt up the old queen and kill her? If so, how? Black queens are, I discover, very hard to find when there are many bees in the hive.

Aurora, Ill. W. H. N.

ANSWERS.—1. I believe I'd rather Italianize now than next spring. It will interfere more or less with building up the colony in the spring when every bee counts.

2. You'll not get the bees to accept a new queen so long as the old one is in the hive. Hunting the black queens will give you a good lesson in patience. Possibly some hints may be of use to you. Suppose you have looked over the frames carefully the second time without finding the queen, it isn't wise to keep on. She has perhaps hidden somewhere out of sight, goodness only knows where, at any rate you'll probably not find her if you keep on. But leave the hive and come back in half an hour, and next time you may readily find her.

Be careful about using much smoke. Smoke them until you get them to running, and you've small chance of success.

Here's something may help: Take out the first frame, and after looking it over put it in an empty hive, an inch or so from the side of the hive next to you. Put the next one close to it. The third frame an inch or more from the second, and the fourth close to the third. When half the frames are out of the hive, spread the remaining half in the old hive in the same way in pairs. Now your frames are all in pairs, and the bees will be pretty thick on the outside surfaces of each pair, and comparatively few between the two combs of each pair. The queen is very likely to be between the combs.

Now commence your examination of the frames in the empty hive. Frame No. 1 is next to you. Lift it out, and in doing so the side of No. 2 next you is easily seen. Look it over somewhat hastily as you lift out No. 1, then turn over No. 1 and examine the side that was next No. 2, putting the combs back in pairs just as they were, ready to be looked over again if you don't find the queen first time.

Sometimes in a stubborn case it's a good plan to leave the frames thus in pairs for some time (still better if they're scattered in several hives), then after a time the bees without a queen will show themselves quite uneasy, while the pair with the queen will remain tranquil.

By means of a queen-trap or a queen-excluder you may make shorter work of it. Shake the bees off two frames, at least clean enough so you are sure there is no queen there. Put these two frames in an empty hive, and put an excluder over it, or a queen-trap in front. Now shake or brush the bees off the remaining combs on top of the excluder, or in front of the queen-trap. The workers can get through, but not the queen. If they stop going through, start them up with smoke. Better put an empty hive or box over the excluder, so the bees will not fall off on the ground.

Removing Brood or Sections.

1. In removing a frame of brood or sections, from one hive to another, do you shake the bees off, or take all together?

2. Will the bees remain where put, or return to their old home?

ANSWERS.—1. Just as you like. If you give a frame of brood to a colony that has enough bees to take care of it, perhaps it is better to brush off most or all of the bees. Then there's no danger of taking the queen with the brood, and no danger of the strange bees disturbing the queen of the hive to which they are taken. If you take a section to use as a bait to start the bees at work on

another hive, it is a little better to take the bees along.

2. The young bees will stay where they are put, the old ones will return to their old home.

Trap to Prevent Swarming.

A writer in *Gleanings* last September (page 676) told of using a trap on the principle of the Langdon device. He would place the hives closer together, and use the trap as an escape, by nailing a board over the zinc, and in a week change places with the brood-chamber. What do you think of it? That would be just the thing for me if it could be done, as I live in the city and have about as large an apiary as I can run—two colonies.

ANSWERS.—The Langdon non-swarmer and its imitations have not turned out as well as expected. You can only tell by trying, whether it will suit your case. But you will have to change twice a week instead of once.

Will Build Up for Winter.

Will a swarm that came out on July 8th build up strong for winter? I moved the sections from the old hive, and they have them about filled. I thought I had better not give them any more.

Altoona, Pa. J. M. G.

ANSWER.—If the season is good, there ought to be no trouble. At any rate I should not feel anxious about a colony that fills its sections, unless the hive is too small to contain enough winter stores. Bees generally look out for themselves, and if they are filling sections you may rest easy that the brood-chamber is not empty. If the harvest was still good, I think I should give them more sections.

Re-Queening to Prevent Swarming.

Is re-queening a good method to follow with a view to prevent swarming? About what time of the year should it be done?

ANSWER.—Re-queening will make no difference about swarming unless a younger queen is given, for it seems settled that a colony with a young queen is not so likely to swarm as one with an old one. Those who depend on this means to help keep down swarming, make the change as early in the season as they can rear good queens, some sending South to get early-reared queens.

HONEY-PLANTS NAMED

Probably Wild Carrot.—Mr. F. H. Richardson, Laclede, Mo., asks the following question:

What is the enclosed blossom? Bees are working very strong on them. It is very dry here, and the honey-flow is shut off except from this plant, which grows in sloughs. F. H. RICHARDSON.

Prof. T. J. Burrill, to whom we referred Mr. R.'s question, replied:

The enclosed plant seems to be wild carrot, though a positive determination is impossible from the specimen. The wild carrot is an introduced weed, becoming common in many sections of the West, especially upon clayey soils, and often in dry places, while others with similar flowers are natives, and grow in moist ground. Bees seem fond of the flowers, but the plants are not known to be of any special value for honey. T. J. BURRILL.

Canada Thistle.—Mr. Geo. T. Gunn, of Wall Lake, Iowa, wrote us as follows:

I send you a plant—one of the thistle variety. I would like to know if it is a Canada thistle. The flowers are like the bull thistle, only smaller.

GEO. T. GUNN.

Prof. T. J. Burrill, to whom we forwarded the thistle specimen, kindly replied thus:

The plant you enclose is the Canada thistle. A peculiarity of this plant in our country is that it very rarely seeds. The specimen you enclose has no seeds. This, of course, makes its extermination very much easier than in such parts of the country where the propagation is by seed as well as by subterranean root-stalks. Indeed, on rich soils in Illinois it is not hard to exterminate. T. J. BURRILL.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

That Twisting Colic.

The India rubber man at the circus is scarcely to be compared in his antics with the contortions of the American boy in melon-time! That boy can come nearest tying himself into a bow-knot, after visiting his neighbor's patch, than can a boy of any other nationality I have observed. The jack-knife bend seems more natural to him; hence my reason for dedicating this particular article for his particular good.

Boys *will* eat melons—theirs or somebody else's, and when that succulent globe is not to be obtained, they do not hesitate at a good-sized cucumber. Mothers are not often let into these juvenile secrets, but the facts are just as correctly stated. *I've* been a boy—long ago—and my sympathies are in consequence aroused. Melons *are* good—no mistake. It is only the indiscriminate way of eating them that brings trouble.

I have seen all kind of boys—young boys, middle-aged, and old boys—eat the juicy "millions" in a way to give even the observer a stomach-ache! When finished, little was left of that melon but the transparent rind. *There* is the trouble—the nearer the skin, the more colic it contains to the square inch. If boys would not be quite so greedy to eat to the very outside, they would be entirely safe. Melons of all kinds are really good for them, or any one else that likes them; they act well on stomach, bowels and kidneys, if the precaution named is observed.

The rule applies equally well to *cucumbers*. We have seen some housekeepers so very economical that in paring them for the table, they would leave long, thin streaks of the green skin, and the unhappy guest would fairly groan at the bitterness of this vegetable gall, soon to be twinged and tortured with colic and diarrhea from the effect of this false economy.

Always peel your "cukes" so that *none* of the rind remains, and you need then have no fear of eating all you wish of them. They are at their best when just big enough to eat—before they begin to turn even a little yellow. At this point they are flabby and coarse, the fiber is tough and indigestible, and seeds nearly ripe and woody. In this condition they are unpalatable, and may cause indigestion.

When suffering from the form of colic these vegetables produce, a pint of hot water with a few drops of Jamaica ginger in it, taken at intervals of an hour or less, is as effective and harmless as any remedy. But to *prevent* as indicated, is better than all medicines.

Learn to be Self-Dependent.

It is surprising how lavish is Nature in her care of mankind. If we could but rightly interpret her language it would, no doubt, be appreciated that she has prepared all things for our use and benefit. The fruits of the orchard, the grains of the fields, the growths in the byways, the flowers in our paths, are all conducive to our health and happiness if we only knew how rightly to use them.

In Nature's domains we may find the food that nourishes, and the herbs that heal when we, like willful children, have transgressed her righteous edicts. All things needful, but require a knowledge of their being and use. But how little we avail ourselves of her laws and supplies! How indifferent we seem to her unstinted bounty! Instead of consulting her and drawing inspiration and health from the great healing fountain, we prefer to grope helplessly, and when in distress to call to our aid the doctor, who is himself making efforts to follow in Nature's footsteps, and supplement her behests.

Well, we should feel grateful that so faithful students can be found to guide us out of trouble in time of need. But, nevertheless, I insist that we should, by observation and intelligent reasoning, place ourselves less under obligation to others by doing more for ourselves. You can have your servant make bread for you, but you ought to have acquired the knowledge to be independent of such service if need be. Just so with many facts in our daily life. We should give sufficient thought to means of health and prevention of disease as to render us more independent of others' ministrations. One need not go into the deeper studies of the medical art to do this, but simply supply one's self with rudimentary works on hygiene, and the exercise of

the good judgment you have been endowed with.

Not that you are likely to discard the services of your good family physician, because need enough will ever recur for his mature experience, but that you may obviate the necessity of calling his services as often, and be more helpful to his ministrations, by intelligent co-operation, when circumstances occur. You will do well to learn of him those important facts regarding your well-being which he is so able and willing to impart. Make of him your trusted confidential adviser, and your faith will be well-founded.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Aug. 16.—East Tennessee, at Whitesburg, Tenn
H. F. Coleman, Sec., Sneedville, Tenn.

Oct. 16–18.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.

Sept. 11–13.—Nebraska State, at Lincoln.
L. D. Stilson, Sec., York, Nebr.

Sept. 15.—S. E. Kansas, at Bronson, Kan.
J. C. Balch, Sec., Bronson, Kans.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

Horses Stung to Death.—An occasional accident is reported, where bees have attacked animals and stung them to death. Two such were sent us by Mr. D. D. Daniher, of Madison, Wis. One report says that "a swarm settled upon two horses at Prairie du Chien, Wis., and stung them to death." The other item reads as follows, having been taken from the Boscobel, Wis., *Enterprise* of July 4, 1894:

Austin Dexter's bees became greatly enraged Monday afternoon, caused from being robbed of the fruit of their labor, and took their revenge out on the wrong party—attacking horses and cattle enclosed in a pasture across the road and teams and people passing by. The little pests were so vicious, and such a myriad of them, that a valuable mare owned by C. R. Rand was stung to death in a short time. Two other horses belonging to the same gentleman, and one owned by John Lenahan, were so badly stung that their recovery is considered doubtful. Cattle in the same pasture escaped by flight to the woods. Mr. Rand will claim damages for the loss, but Mr. Dexter declares the bees were not his.

Eye-witnesses state that the frisky honey getters settled down on on the animals in a great mass, completely covering their heads, necks and shoulders. A pitiful sight it was indeed to see the poor animals kicking and pawing in their vain efforts to rid themselves of the little monsters, and the pain must have been intense.

A Crawford county bee-keeper explains the bees' attack this way:

There was a strong wind blowing all day Monday, and consequently the honey-laden insects flew low on returning to their hives, and, striking against the horses in their flight, became enraged, hence the attack.

Of course, all such serious accidents as above recorded, are to be regretted, and yet in nearly every case it is simply a result of carelessness on the part of someone. If possible, bee-keepers should always warn those who are not aware of apparent or real danger in the near vicinity of bees, especially when aroused. Possibly by so doing many a costly accident may be avoided, and continued friendliness toward themselves and the bees will thus be fully assured.

"Foul Brood: Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 7.

(Continued from page 111.)

MARKETING HONEY.

As it is one trade to produce a crop, and another to sell it, I will give you my plans for disposing of our own honey, and I have *never* in all my life produced more honey than I could sell at a fair price, and, in fact, I never had as much as I could sell.

Now, if you are a beginner, you cannot afford to have any middle-men or commission business. When I say you cannot afford it, I mean from the standpoint of making your bees pay their own way, and something left to pay you for your trouble. You may be worth a million dollars, but I discuss this matter from a business stand-point, and I repeat, you cannot afford to put a small crop of honey out on commission, for you need every cent it will bring to start you off next year.

Well, to do this, take your honey right to the doors of the consumers, and weigh out just what they wish—from 5 cents worth up. Find out what honey retails at in your town, and always sell goods at the same, as I do not believe in running down a honey market.

Then you can tell your customers who you are, where you live, and that your business is producing nice honey like this; and all this can be told while you are weighing out the honey, so no time is lost either by yourself or customer. And, bear in mind that it is no harm to ask a big price, but awfully bad to give light weight or measure. So say to each customer: "See, there; I give you big, full weight, all nice, fresh honey right from the bee-hives—my own producing!"

You know it to be pure, so you need not be afraid to talk, and I tell you it will be but a short while until your market will hunt you up, and you will be planning how to best enlarge your apiary to accommodate your trade.

Now, I *know* all this is true, for it is pure, undefiled experience that I am giving you; and if you will follow my advice, I will insure you a market for all of your honey. If you have no town near you, go to a town to sell your honey, as people in towns and cities depend upon buying about all they get.

When you have run your apiary up to where you are a big bee-keeper, and can ship out honey by the ton, and have more honey than you have time to sell yourself, then hunt up a good, honest commission firm, and make arrangements to ship them all the honey that you do not sell at your own door, or by going to town and back.

Will you bear with me a little, when I tell you the way for a bee-keeper or farmer to do? If he or she wishes to mount above the obstacles of life, they should *never* go to town without taking something along to sell, unless when they go to church on Sundays.

All the little necessaries can be purchased for our tables, such as soda, pepper, spice, coffee, etc., and save the money to fit us up for another year. You will soon learn that you can sell almost anything you can raise on a farm—honey, eggs, butter or vegetables, chickens, etc., and as I said before, people that live in town will watch out for you, and as they buy all they get, they will soon become acquainted with you, and will know your team and wagon as far as they can see it; and by just a little trouble on our part, a trade can in this way be built up to take our honey or anything else we have, with but little time being lost.

Study your honey market as you do your bees and honey-plants, and learn how or in what shape your customers like their honey, and put it up to suit them, and you will soon be moving on as smoothly as heart could wish. But if we do not put forth an energy to get ourselves started out in the world, we had better not start at all.

Now, if one of you follows my instructions and fails to sell all your honey, will you please write me, and tell me on what part you made a failure? I will then see if I can suggest a remedy

JENNIE ATCHLEY.

(To be continued.)

Have You Read page 131 yet?

Bee-Keepers and Papers on Adulteration.

Query 934.—1. In your opinion, what can bee-keepers do toward the prevention of honey-adulteration?

2. What should, or can, the bee-papers do in the same line?—Mo.

1. Do not engage in it themselves. 2. Expose those who do.—MRS. L. HARRISON.

1. Petition Congress and Legislatures. 2. Work with bee-keepers.—JAS. A. STONE.

1 and 2. Try to get laws passed to prevent adulteration, and then enforce the laws.—E. FRANCE.

1. *Each* ONE put up a perfectly pure article. 2. Just as they have been doing.—MRS. J. N. HEATER.

1 and 2. Sit down on it wherever they find it, until we get more stringent laws on the matter.—DADANT & SON.

1. Secure legal protection, and have courage enough to enforce the law. 2. Give 'em—well, fits!—J. P. H. BROWN.

1. Unite together and prosecute. 2. Give fearlessly all the light that comes upon it, without fear or favor.—C. C. MILLER.

1. Produce pure honey and fight adulteration when it can be detected. 2. Keep still when talk will do no good. Usually it does harm.—J. A. GREEN.

1 and 2. Never have anything to do with anything that looks like adulteration. Put your brand or mark on every package sold to *consumers*.—H. D. CUTTING.

1 and 2. Get the world converted to the religion of our Lord and Savior Jesus Christ, and when all live as He taught, there will be no adulteration.—G. M. DOOLITTLE.

1. Solicit our representatives to enact appropriate laws, and when secured, enforce them. 2. Throw the force of their influence in the same direction.—J. M. HAMBAUGH.

1. Secure radical laws opposed to it, and through the Bee-Keepers' Union, which all should join, prosecute all who practice it. 2. Aid in doing the above.—A. J. COOK.

1. They can abstain from themselves adulterating, and supply the market with a good and pure article. 2. The bee-papers can condemn adulteration, and expose the guilty when found out.—M. MAHIN.

1. Prosecute all against whom it can be proved, and by all possible means of prevention, both moral and legal. 2. Show the matter up as fully as possible, and frown down every known violation of law.—J. E. POND.

1 and 2. In my opinion, the less said upon this subject the better! Let the Bee-Keepers' Union have entire charge of the matter; let the war be *silent, aggressive* and *persistent*. All good bee-keepers "*know*, it cannot be done!"—W. M. BARNUM.

1. They can avoid adulteration themselves, and disapprove of it in others. 2. The bee-papers can do what the leading ones have already done—cry down the adulterators, recommend means for their detection, and laws for their punishment.—G. L. TINKER.

1. Combine and work. The trouble is, they are too big fools to pull together on account of petty jealousies and short-sightedness as to their own interests. 2. Urge combination, and point out the way to do this. We should do more than publish—we should prosecute.—J. H. LARRABEE.

1. Labor to secure good laws against adulteration, and be wisely active in making the laws effective. 2. They can encourage inquiry as to the condition of the laws, and urge that efforts be made to secure good laws where there are none, or where existing ones are defective.—R. L. TAYLOR.

1. Let all join the Bee-Keepers' Union and raise money enough so that Manager Newman can have the backing to look up these large honey-producers that have no bees. 2. The same as they have been doing—that is, all they can to expose and bring adulterators to justice.—S. I. FREEBORN.

1 and 2. Great Scott, what a hard question! I once heard Gov. Ireland, of this State, say in a speech that the people were mad at him for not stopping fence cutting, just because he did not put his foot on it and stop it, when the fence cutters would follow the soldiers and cut fences behind them. He said

all he could do was to use the money of the State and his influence against it. So I believe to stop honey adulteration, we *must* use our money and influence against it.—MRS. JENNIE ATCHLEY.

1. Produce and sell only pure honey themselves, and the name on a can or section should be a guarantee of purity. Instruct their customers how to detect adulteration in all known ways. 2. The bee-keepers should do all they can to educate the people, making adulterated honey unsalable.—C. H. DIBBERN.

1. Do not adulterate, and by all honorable means expose and denounce those who do. 2. Condemn adulteration under all circumstances; insist that all things shall be called by their proper names, and do not screen those who put bad or adulterated goods on the market, simply because they belong to "our set."—EMERSON T. ABBOTT.

1. Execute the laws against the criminals. The trouble is, public sentiment has become so blunted by the nearly universal practice of adulterating food, drink and so-called medicine, that nobody seems to care unless his pocketbook is touched by it. 2. Bee-papers can advertise the adulterators until their business "plays out."—G. W. DEMAREE.

1. *a*—Be honest themselves. *b*—Sell none but the finest quality of extracted honey. *c*—Cultivate and supply the home market with such an article as will keep out the commercial put-up-in-the-city stuff. *d*—Put up and ship in packages suitable for retail trade. 2. *a*—Expose violators, whether bee-keepers or others. *b*—Educate the people. *c*—Advocate pure-food laws.—EUGENE SECOR.

1. Fight it at every stage in every way possible, the same as every kind of wickedness. This form of wickedness appeals directly to bee-keepers as attacking their livelihood. 2. Sit on the fence and tell their readers that sugar syrup is honey, because chemists say so! Then turn around and say that chemists cannot tell pure from impure honey, that it may be half or two-thirds glucose, and their verdict not conclusive as to purity! Assure the bee-keepers and dealers that no law can successfully attack them if they mix! A first-class journal should strongly condemn any one attempting to make it unpleasant for mixers! And, finally, should tell its readers how the editor does it himself by new, improved, and original methods!—P. H. ELWOOD.

Value of Catnip as a Honey-Plant.

Written for the American Bee Journal

BY J. C. WALLENMEYER.

I see that bee-pasturage is again being agitated in the bee-papers, and W. H. Morse on page 26 of the AMERICAN BEE JOURNAL offers a valuable suggestion. If carried out, bee-keepers all over our broad United States could profit by it. How can we expect a crop if we have no source? By judicious sowing of seeds we can maintain a continuous honey-flow.

Mr. Newman states that by scattering about 30 cents worth of seeds of the right kind for every colony, we cannot overstock an apiary even though we increase to 500 colonies.

In preference to all honey-plants in the world, I prefer catnip, as I know it yields more honey than any other plant, year for year. We all know that every honey-plant sometimes fails, but catnip never does. It has many good points that place it in the lead. First, you can sow the seed anytime and anywhere, and when once sown it never needs any attention whatever, on the part of the bee-keeper, but spreads with wonderful rapidity. Its perfect immunity from grazing cattle is a commendable feature. It successfully withstands all drouths, and makes a vigorous growth, flourishing where nothing else will grow. Its long, penetrating roots account for this.

I have visited my plants in the garden at every hour of the day, from early morn until night, and always found the blossoms covered with bees. My diary last year shows that the bloom lasted from July 1st until frost on Oct. 10th, making 100 days of continuous bloom. No other plant will do this. Our best honey-sources from which we get flows never last much longer than two weeks. White clover was a complete failure in this locality until about the last five

days of its bloom. Not so with catnip—it yields honey incessantly.

Even sweet clover is only an experiment, some reporting success, others failure. It has several bad points. Dr. Miller reports its adversity to taking a foothold, and also takes two years to bloom.

Mr. Root's basswood orchard of 4,000 trees, covering some 10 acres which must have cost an immense amount of money, besides occupying these 10 acres for 10 years before blooming, is now reported to be covered with buds—something which he says has not happened for years. Besides the honey-yield, these trees are good for nothing except being one of the finest shade-trees in the world.

Therefore, I am satisfied that catnip is the best honey-producing plant in the world. Mr. Quinby is quoted in "A B C of Bee-Culture," that if he were to grow any plant exclusively for the honey it produced, that plant would be catnip. It yields an excellent honey, and the reason it has not caught universal attention is that it is so scarce. The leaves can be gathered for tea, and sold to druggists. The seed also finds ready sale. I hope all bee-keepers will give it a trial.

Evansville, Ind., July 9.

Paper Pans for Shipping-Cases.

Mr. G. M. Doolittle was asked the following question, and requested to reply to it in *Gleanings*, which he did in the number for July 15th:

QUESTION.—I understand that you use paper pans inside of your shipping-cases, to catch the drip from any section that may chance to "bleed" from any reason, thus preventing this drip from soiling the cases of honey which may be below it, as it otherwise would, were no such thing used. What I should like to know is, how you fold these paper pans. I have a way of folding them over a sheet of tin, cut to fit the inside of the case; but it is rather slow where hundreds of them have to be prepared in a single season. It seems to me that some simple machine might be devised to do the folding with one or two motions, without having to go over each edge and corner separately.

ANSWER.—This question comes in very opportunely, as now is the time we should prepare our honey for market; and I know of no one thing which helps as much to bring favor to our goods as do these paper pans in the bottom of each case.

While in New York, some years ago, I saw cases of honey piled ten and twelve high, and the drip from the upper cases ran all the way down to the floor, daubing the snow-white cases, which had been gotten out and put up with great pains, not only spoiling all their beauty, but making them a sticky, nasty mess to handle. Up to that time I had not used paper pans; but then resolved that I would try to fix some way so that my honey should not appear in market in that condition.

That winter I met Samuel Snow, a quiet bee-keeper residing in our county, at the New York State Bee-Keepers' Convention, and in a private conversation with him, he told me that he used paper pans for the prevention of drip through shipping-cases, telling minutely how he made them, kind of paper used, etc. The next season found me buying manilla paper, of a quality costing 10 cents per pound, in quantities of from five to ten pounds, when a piece of board was fitted to the inside of the case, the board being ⅛ inch thick. The paper was now cut 1¾ larger each way than was this board, so that, when this paper was folded up evenly all around it, the sides of the paper pans were just ⅞ deep.

The pan was then slipped inside of the case, and a little strip of wood, just as long as the case was wide, and ½ inch wide by 3⁄16 thick, was placed at such distances along the inside of the paper pan as was necessary, so that the ends of the sections rested upon it, thus keeping them up 3⁄16 of an inch from the paper, thus allowing the drip to rest below the sections, so that the outside of the cases was never soiled, while the bottoms of the sections were kept clean also, if anything should occur to start the honey in them leaking. This, of course, requires the cases to be made 3⁄16 deeper than they would be were it not for these little strips of wood; but the keeping of the sections clean is of fully as much importance as the preventing of the drip through the cases.

I have kept leaking honey standing all winter in such cases with paper pans, and the manilla paper seemed sufficient to stand a wetting of honey that length of time, as none of it soaked through so as to come though the case any.

I am well aware that, so far, I have not answered the question; but I thought that, if I said anything on the subject, it should be made plain, so that any one

could make and use the paper pans who wished.

I have no other mode of folding than that described above, or the one-by-one method, and think that, by this plan, with the board, I can fold from 80 to 100 an hour, so that it is not such a serious job unless honey is produced up into the tons. However, if there is a quicker way, or one where several pans can be folded at a time, I as well as others should like to know it.

Borodino, N. Y.

Bee-Keeping in Australia—Newsy Letter

Written for the American Bee Journal

BY EDWARD RYE.

Wingham is a little municipal town of 600 inhabitants, the center of an agricultural district of about 3,000. It is about 230 miles north of Sydney, on the Pacific slope. The temperature ranges from about 30° Fahr. in the winter to 110° in the summer. Maize is the staple of the district, and many other kinds of grain are also grown. There is a butter factory here, and milk and butter are produced in large quantities; also grapes and most other kinds of fruits.

The slope is a moist one; few months passing without their due quota of moisture. Honey and wax may also be reckoned amongst its productions; but hitherto the "frame hive" system has been unknown. The official return for bees and honey and wax for the year ending Dec. 31, 1893, was 700 colonies of bees, 16,252 pounds of honey, and 747 pounds of wax. By this you will see that we have bees and honey; but considering that there is thick forest everywhere, of eucalyptus and other honey-producing trees, with fields of maize and clover, and other growing crops, in great abundance around us, the yield is nothing to boast about. However, there is likely now to be a change.

Some 15 months ago, a Mr. Albert Gale, an expert, and officer of the Government, was sent up here for the special purpose of trying to introduce the "scientific principles" of bee-keeping to this district; and with very gratifying results, as there are now in this locality some dozen men interested, and have between them some 200 colonies in the movable frames, and the most of them Italianized. Your humble servant, who has had bees nearly all his life (in the boxes) "caught on" at once; and the day after the lecture he ordered a movable-frame hive and an Italian queen, and forthwith commenced; (at the same time taking the matter up in the Wingham *Chronicle* with good results).

In the winter of 1893, I put six colonies down for winter, and came through with four. Speaking of winter, however, reminds me that in comparison with yours, we have no winter here, although the bees, if they are not strong, seem to suffer severely. We do not usually have any frost until the end of May, and it continues "frosting" and raining, and shining then intermittingly until about the end of August. It is not cold, however, only until about 9 a.m., and from 5 p.m., and the bees fly briskly in the intermediate time, bringing in pollen, but little or no honey until the latter end of August, when they begin to get a little honey, and breed very fast. From about the middle of September until the latter end of January, then there is a continuous honey-flow. It is impossible, though, to classify the honey, as all kinds of forest trees are blooming at once, and you can only declare that the flavor is "eucalyptus."

But to return. After winter, I joined forces with a neighbor, M. L. Cameron, M. D. (formerly of Canada, by the way), who laid out a nice plot of ground, capable of holding 400 or 500 colonies of bees; and we soon increased our number of colonies, as at present writing, to 60, and intend to fill the yard as soon as possible. These we have Italianized, and have the hives now full of stores, and snug for the winter.

We have also, I might say in passing, some very choice queens amongst the lot—one that I got from Mr. A. I. Root, of your country, last August.

This, perhaps, of your experienced bee-keepers may think is jumping into the business quickly—that is, for a beginner to get from 4 to 60 in such a short time; but we go quickly here, and as our colonies are in splendid condition bees, honey, brood, straight combs (8 frames, Hoffman-Root), and all orthodox, we think we deserve credit for our "go." Yet, after all, we have to thank you "Yankees," as it is owing to your literature and your appliances that we are able to do it.

When I bought my first hive, I forgot to mention, I got a copy of Root's "A B C of Bee-Culture," and subscribed to his paper. Then I took the AMERICAN BEE JOURNAL, and have read them over

again from cover to cover. So that now there is scarcely a subject you bee-men over there have discussed, during the past 15 months, that I am not conversant with; and my opinion is that with our bees, and your appliances and bee-books; and our floral wealth, with Italian queens, we are destined to be the foremost honey-producing country in the world! This, however, you may deem Australian "blow," as Anthony Trollope would say, so I will cease boasting, and continue.

I have spoken only of myself. There is a neighbor here who has even got on quicker than I have. Alderman John Pollock is also a disciple of Gale's. At the time of the lecture I spoke of, he had 16 colonies in boxes, and he at once got the "A B C of Bee-Culture, and enough hives, and transferred the whole lot. Besides these, he also bought 30 colonies of bees and transferred them. He then got enough Italian queens to give each of his colonies one of them. This was in January, and he got through the winter with 34. Early in the spring he broke up a number of them into nuclei colonies for queen-rearing, sold about five dozen queens, got a ton of honey, and increased to 70 colonies, which he has now set down for the winter.

Wingham, N. S. W., April 12.

Old or Young Bees for Winter.

Written for the American Bee Journal

BY J. F. MERRILL.

As before promised, I will give my experience in the wintering and springing of my bees in 1893 and 1894. I thought when I read Mr. B. Taylor's article in the issue of the AMERICAN BEE JOURNAL for May 24th, I would never write one word of my experience, as it is entirely in contradiction of his experience, but I have concluded to give it, and let all who read it sift it and sand it as they please.

My bees went into winter quarters in the fall of 1893 with the fewest young bees that I ever saw in the number of colonies that I had. No honey worth mentioning was gathered after the middle of July, and the last of August found almost all of my new colonies in a starving condition, and so reduced in bees that I had to double them up to place them in fair condition for winter as to bees.

We had no fall flow of honey at all, and the middle of September found my 36 colonies of bees with less than 100 pounds of honey in the whole number. I always weigh every hive, so I know just what they have.

I fed every colony until each contained 30 pounds of stores from granulated sugar syrup, in the proportion of two parts of sugar to one of water.

I packed them up snugly and warm, and left them on the summer stands, with all the horrors of despair, never expecting such old bees could winter.

Now for the result: On May 23, 1894, I was in possession of 36 as fine colonies of bees as I ever saw at that time of the year. In all my experience in keeping bees, I never saw hives so well filled with bees and brood as they were the first of May this year.

Now I am not going to say that I prefer old bees for winter—oh, no! another winter might give altogether different results, for we had a very warm winter and a very early spring, and this may account for their fine wintering.

I believe with Mr. Taylor, that the conditions exist in a hive in the fall for their successful wintering. An extremely severe winter of course might not bring bees through quite as strong as a mild one. Mr. Taylor says that plenty of young bees and plenty of natural stores are the conditions. I shall disagree with him in only one point, viz.: Give me the granulated sugar instead of the honey, for this locality.

I would not give anybody 10 cents per colony to warrant my bees for winter when fed on sugar.

Sometime I will give my experience in wintering bees on honey and granulated sugar.

Corinth, Vt.

Feeding Sugar to Produce "Honey."

The following question was asked in the *National Stockman* recently, and answered by Dr. C. C. Miller:

QUESTION.—Would it be profitable for me to feed sugar to my bees, as materials for honey are scarce, and how much should be given per day?

ANSWER.—It depends a little upon just what you mean. Feeding for the support of bees is one thing; feeding to have the material fed stored by the bees, quite another. During the cold, wet weather in the first part of June, many colonies run short of stores, some of

them destroying their brood, some of them starving to death. In such case it would be very profitabie to feed sugar syrup for stores, even if sugar cost more per pound than honey. For in some cases ten cents worth of sugar would have saved the life of a colony worth many times as much.

It doesn't greatly matter how much is fed per day, only so they have enough to bridge over the time of scarcity.

But under no consideration would I advise feeding sugar syrup to have the bees put it in combs to be used or sold as honey. With regard to the profit, just figure a little. Of late years some have gone out of the business of producing honey because there is not enough profit in it. Now if they are not satisfied with the profit when the materials for honey are entirely free, it will certainly be just so much worse if materials have to be bought. In other words, if the time and labor of feeding, together with the sugar used, makes the syrup 5 cents a pound, then your honey will cost you 5 cents a pound more than the honey of the man who lets his bees find their own honey. Indeed probably more, for whatever the reason may be, it is generally agreed that only part of a pound is stored for every pound fed, whether the material fed be sugar syrup or pure honey.

Besides, if you want the honey for your own use, it will be more convenient to put the sugar syrup itself on the table, without the trouble of feeding it to the bees, for when they put it in the combs it is still sugar syrup. You know that honey varies greatly, according to the material it is made of. Buckwheat honey and clover honey are very unlike. I have eaten honey that had a rank taste and disagreeable smell, and I tasted some at the World's Fair that didn't taste very bad at first, but after some minutes began to burn my throat as if I had been eating wild turnips. So you see it isn't like feeding a cow grass or grain to get butter; the particular flavor comes not from the bee changing the material, but the material itself has the flavor in the first place.

Of course no honest person would attempt to sell sugar syrup for honey, no matter whether fed to the bees or not.

Marengo, Ill.

[Bee-keepers cannot be too careful about feeding sugar syrup to bees. It is all right to feed it, as the Doctor says, for *stores* for the bees to winter on, but it must *never* be fed for the purpose of being put into the sections, or extracted, and afterward sold as honey. Once permit the public to get a clear taste of sugar in what has been sold them as pure honey, and it won't be long before it will be utterly impossible to sell honey. If purchasers want sugar in their honey to "sweeten" it, they are quite able to put it in themselves. Let every bee-keeper avoid even the slightest appearance of adulteration. No other course will ever pay.—EDITOR.]

Foul Brood—Better Proof Asked For.

Written for the American Bee Journal

BY RANDOLPH GRADEN.

If I may be permitted, I would like to explain some things in regard to foul brood.

All have seen Mr. McEvoy's article and challenge to me in the AMERICAN BEE JOURNAL of Sept. 7, 1893. In the BEE JOURNAL of Jan. 11, 1894, I made a reply to his challenge, and asked to have it amended. Then in the BEE JOURNAL of April 19, 1894, Mr. McEvoy says he has no time to go to Michigan, so will not accept the amendment, but makes another challenge, to send money to an entire stranger to me, and in [to me] a strange country, to be tried in just everything his own way. Now, do you think their is any justice in that? And do you think that any sane man upon the face of this earth would comply with that request?

NOT HASTY IN THE MATTER.

Before reviewing Mr. McEvoy's article any further, let me say that I was not hasty in any of the matters he refers to, nor did I clap my hands and shout "Eureka!" as soon as I discovered a method of cleaning out foul brood, but I waited three long years, to see if I might not be mistaken in the results and observations, but after seeing that it was, to all appearances, a success in every instance, and seeing others recommending methods that in my hands proved a failure, I felt in duty bound to try to save some of the readers of the AMERICAN BEE JOURNAL their time and trouble in trying to cure foul brood with such methods that proved a failure with me. I have a letter from a bee-keeper who says that he treated his bees by Mr. McEvoy's method, but he says that

the disease appears again soon after being treated, and he thinks that it is on account of his bees robbing foul-broody colonies in his neighborhood, but as he procured my method of treating foul brood a short time ago, I think that he will soon change his mind in regard to the robbing being the cause of the disease re-appearing among his bees.

DISEASE CARRIED IN HONEY.

Now I do not want to be understood as saying that the disease cannot be carried to a healthy colony in honey, as I never said such a thing, for such I do not know for a fact, and in my former articles on that subject I said that honey was thrown out of the combs with the extractor or otherwise; where the foul matter is thrown out of the combs and mixed with the honey and fed to the bees without first thoroughly boiling and skimming, such honey I should have grave doubts about. I have only claimed, and do claim yet, and will remain by such belief [as seeing is believing, and the proof of the pudding is in the eating] until it has been proven beyond a doubt that I am mistaken in saying that bees do not spread the disease simply by robbing diseased colonies, except when the foul matter aforesaid is fed and stored in such combs.

Still, Mr. McEvoy says that I am very much mistaken, so if that is the case I must be doing a great wrong to the bee-keepers in saying so, but let us see what proof Mr. McEvoy produces.

He says that Dr. Howard's test cases will forever settle this question about the honey in foul-broody colonies not being diseased. He says Dr. Howard uncapped the sealed honey that he [McEvoy] sent him, and found the spores of the disease, etc. Now, is that all the proof Mr. McEvoy has, to allow him to say that I am very much mistaken, and that it is a settled matter forever? Now, if that is all, then he must not think that it is a settled matter, as I think there are many more besides myself who will not accept such proof as that to settle a matter of that kind; and it only goes to show how some people jump at conclusions, and we must say that Mr. McEvoy is a little too fast and ahead of time. He leaves out such as is most needed to settle a matter of that kind, and he must go back and try it over, and give us better proof before we will be satisfied with the results of the tests made. For he has not said that he knew for a positive fact that the honey in the sealed combs that he sent to Dr. Howard was gathered from the bloom of trees and plants, and that he is positive that the bees stored no honey that was extracted from foul-broody combs, or honey that was spilled, together with some of the foul matter of foul brood, in the hands of some bungling person in cleaning out some foul-broody hive, or otherwise, that was sent to Dr. Howard for the tests.

Now, if Mr. McEvoy wanted to be justified in the least in saying that I am very much mistaken, that bees in robbing do not carry the disease to their hives, he would have to take a brood-comb out of a foul-broody colony that was in its last stages of the disease, where honey was stored in cells where foul brood had been in, and cleaned out by the bees and honey stored therein, as the queen does not like to deposit eggs in such cells if any others can be found in the hive ready for eggs; but the bees will fill such cells with honey if any is to be had. Then take such comb with honey, as aforesaid, and let the bees from a colony that is positively free and clean of the disease foul brood, and let the bees from such hive fill themselves from such combs, and then catch some of the bees and have the honey contained in their honey-sacs or stomachs examined with a microscope, and see if it contained spores of foul brood. Also, see if the colony where such honey is carried to by the bees from such combs will become diseased; and not until some tests have been made in some such way, showing that I am wrong, will I admit that I may have been mistaken. Nor is Mr. McEvoy justified in saying that I am mistaken.

NOT SPREAD BY ROBBER BEES.

Again, he says that Graden doesn't believe that foul brood is spread in any apiary by robber bees. That is correct. As I have seen too much robbing done and never saw a colony become diseased on account of such robbing, time and space forbids me giving full details in that regard.

He says further that I am trying to show that the disease is spread about from one colony to another in and by the winds. Now, cannot Mr. McEvoy understand my article referred to by him, or is he purposely trying to twist and turn it in such a way as to suit himself? If so, please let me say that it is not made out of such soft stuff as to be twisted in any shape desired, for it will break first. Still, it will take better proof than I have as yet seen or heard of to break it.

Now, if Mr. McEvoy will please go back to my article, and see if he can find the word "wind" as he has it in his article, it is only one word—but space forbids giving a full explanation in this article as to the great difference it makes.

As to the remainder said upon that part of my article, in a way of explanation, is without any proof or foundation, but simply air-castles, and, as the old saying goes, trying to make mountains out of molehills, for who said anything about clouds of disease germs, except Mr. McEvoy himself? Still, if there was no wind nor clouds of disease-germs, there was air, and it is very light at times, so that the odor that arises from any substance does not shoot up and away, as it does when the air is heavy and in motion, as wind blowing.

HOW THE DISEASE SPREADS.

As I have already told in my former article what my observations were in regard to the spreading of the disease, now I will tell what led me on to those observations.

Prior, or before I had foul brood in my apiary, the underside of the roof of my shop, and all the other out-buildings where they could get in, were lined with wasps' nests, and thousands of wasps were reared every season. As they did me no damage at that time, and I am not in the habit of molesting or destroying anything that does me no harm, they were allowed full sway. There were also many nests down near the ground under boards and anything that provided shelter for them. Some built in the grass. There were also some hornet nests in some of the trees not far from the apiary nearly every season; also some yellow jackets' nests, both in the trees and in the ground, but at the time when foul brood was at its highest pitch in my apiary, and just before I discovered my method of succeeding in cleaning it out, in looking around in the upper part of my shop, I noticed that there were only a few old wasps, and most of the nests deserted.

I was surprised, and began making examinations as to the cause of so few wasps, and to my great surprise I found the brood in a very rotten condition, and some of it dried up, and very much resembled the foul brood of bees, except as to the odor. Whereupon I started on an examining tour, and looked in all the buildings, and wherever I knew that they were in the habit of formerly nesting, for the wasp nests, and not a sound and healthy nest could be found anywhere near my apiary, except a very few that were down near the ground, and well covered.

Next I looked for the nests of the hornets and yellow jackets, which I found in the same fix as the wasp nests, except the yellow jackets that had their nests in the ground were too strong to allow anything to meddle with them, and looked as healthy as any I ever saw.

In one instance I examined a hornets' nest in the presence of others. It was a large nest, and not one live hornet could be found in it, and the stench from the rotten matter was so great that I had to cast it away, for the smell from the foul brood of bees would be nothing as compared with it. Not a single healthy wasp, hornet or jacket nest did I find anywhere near my apiary, that was up and away from the ground.

Now will such who criticise my former article on that subject of spores or germs floating through or being carried around in the air, answer the following questions in a friendly and impartial manner?

SOME QUESTIONS TO ANSWER.

Was the rotten brood of the aforesaid nests foul brood, such as the bees are subject to? If not, then what was it? If it was, then how was the disease carried to their nests? I never saw a wasp or a jacket get any of the foul-broody honey, but the hornets might have caught flies, the flies might have had some of the foul-broody honey, and the hornets might have carried the flies to feed their brood. But in case of the wasps and jackets, if they say it was carried in the honey, then why did not all the nests in or very near the ground become diseased? Now please do not say you think I am very much mistaken, but give facts and proofs that are beyond a doubt. I have never said that I knew for a fact that the disease was conveyed through the air, but I have come to that conclusion, and have simply asked the readers of the AMERICAN BEE JOURNAL if it ever occurred to them that the disease spreads in that way, or that being one way in which it spreads.

If any one wants to test the matter of odor, let them take from a very foul-broody colony all the covering from the brood-frames, and then spread a piece of wire cloth that will cover the whole of the hive so that no bees can get through. Then take a strong, healthy colony, remove the bottom-board, and set it upon the diseased colony, so that the air can pass from the diseased hive through the healthy hive. Do this in

the night, so that no bees can get from one hive to the other, but only the air, and see if they will get the disease simply from the odor that will rise up through the healthy brood.

Why not have some of our experiment stations make some such tests, as are mentioned in this article?

Now a few more words and this article is ended. Lastly, Mr. McEvoy says that Mr. Simmins has given his method that cures in many cases, and he (McEvoy) has given his that cures in all cases. Now he wants me to publish my method. What in the name of commonsense does he want with my method, when his cures in all cases? But perhaps he thinks I have an easier way! Oh, yes, I have an easier, surer, and safer way—that is, in my hands, as I only have to shake the bees from the combs once—not upon foundation starters, either. After that, the bees do their own shaking, which is original with me only, as far as I have ever heard, seen, or know.

But my method will never be made known by me, otherwise than I have already stated in my former article, as I am yet out $3.00 in cash on getting my treatise printed, which will call for [at least] 12 subscribers to balance accounts. But if Mr. McEvoy is very anxious to see my treatise, why, he can send along his quarter of a dollar to help pay for printing, and get it. But why should he throw his money away in that way? as he would only say, "Graden is very much mistaken!"

Taylor Centre, Mich.

Home Marketing of Honey.

Read at the Kansas State Bee-Convention

BY R. B. LEAHY.

I will give my experience in building up a home market for honey, both extracted and comb.

Some eight years ago, I had my first large honey crop—that is, large for me—about 7,000 pounds. As the town in which I lived at that time had only about 2,000 inhabitants, I never dreamed of finding a home market for as much honey as this, especially when I had had from one to two dozen tumblers and one and two pound packages in as many grocery stores, for the past three months, with only an occasional sale of one of said small packages. By this method you will see I had honey enough to last this town many years.

As most of my honey at this time was extracted, I wrote to some commission-houses in the large cities, asking them what they would pay per pound for my honey in 60-pound cans, and sent sample with each inquiry. The best offer received was 6½ cents, as they said they could afford to give this much owing to the fine quality of the honey.

The thought occured to me then, and I have never changed my mind since, that the people at home, too, would buy honey in large quantities at these prices and if so, why not give them a chance, and save the freight and expense of packages or vessels to ship it in? I acted on the impulse of the moment, got a large glass pitcher, and started out to sweeten the town.

I went from house to house and took orders for honey from sample—no order for less than one gallon, and from that to five, and charged 9 cents per pound per gallon where only single gallons were ordered; and 8 cents per pound on five gallon orders—each party to furnish his own vessel to put it in. I made my round at 12 o'clock noon, and when I could not not take an order at once, I asked permission to leave a sample, which was usually about ½ pound. Well do I remember how I had to stay up till 12 o'clock that night, filling orders, and the space in my honey-house was insufficient to hold the crowd that was there with their tin buckets, lard cans and pitchers; and it took a small sack to carry my money to the bank the next day.

Many of these people had never before had a chance to buy honey at reasonable prices, as this extracted honey in one-pound packages when retailed in a grocery store, would have had to be sold at 18 cents. Pretty expensive eating, but I will tell you how it all occurs.

If this honey is worth 8 cents per pound, it surely is worth 2 cents per pound to put it up in one-pound packages; a glass tumbler, 4 cents; a nice label, ½ cent; and 3½ cents commission to the grocer. Since that time, I have had regular customers who take their five gallons of honey annually, and they have become so used to having it in their houses for winter use, that I often have to send off and get honey to supply this demand.

I have often said, and meant it, too, that I was too busy to sell honey by the single pound. Again, most people will buy a gallon of honey at 9 cents a pound as quick as they will buy a single pound at 18 cents. This is equally true

of comb honey, if it is offered to them on some such liberal terms.

It is now over six years since I have asked a local grocer to help me sell my honey, and I am under no obligations to them for helping me to dispose of my honey crop; hence, I am at liberty to get out at any time and create a honey-boom.

While the individual customers pay cash, and the grocer usually wants you to "trade it out," take groceries, etc., the former are the most desirable customers. So it appears to me.

Higginsville, Mo.

A Reply to "Bro. Ben."

Written for the American Bee Journal

BY T. C. KELLY.

Shake, Bro. Ben, shake! But, do not go back into "ancient history," as I am no ancient. Adam, no doubt, was a good farmer in his time, but he had advantages which you and I have not. See Gen. II, 9 and 16.

As to provoking a quarrel with some "Old Hayseed"—never! Many times have I raked the hayseed out of my hair before breakfast, in my younger days, and oftener in the evening before going to singing "skule."

As to mistaking you for a tenderfoot, you are mistaken, as I think the years have obliterated that juvenile characteristic.

I have told some of my bee-keeping friends that more attention and less talk would decrease the mortality amongst their bees.

I was not there when Noah and his family landed, and I have failed to see in history anything in regard to his living on dainties after the flood, or potatoes, either. If his wagon-train was as extensive as some of "Uncle Sam's" a few years ago, he and his family were well supplied. As to the New "England Pilgrims," theirs was a case of voluntary exile for the sake of free thought and free speech. "May it ever be so."

As to the "Southern farmers," I think I know a little about them. But, my dear, sir, if you have read the history of the late war, as I have, and noted the prices paid for both necessaries and delicacies (when they could be had), you will see that they did not raise all they found on their tables, as some of those came from our supply trains, occasionally.

Now, Bro. Ben, I have no doubt that you know a good thing when you see (or taste) it, and if you don't say so, you think, "Arise, Peter, slay and eat." "Take no thought for the morrow," till the doctor's pills and bills come in. But few farmers can say, "I have 60 or more varieties of apples, and almost all of the berries." Surely, Bro. Ben, you are better fixed than most bee-keepers.

But I must admit that you are ahead on the salt business. I thought that the salt of commerce was contained in the waters of the earth, the same as sugar in the sap of your maple-trees, and that they both were evaporated to secure the solids. "Where ignorance is bliss, 'tis folly to be wise."

Now, Bro., as to bear and snipe, I have hunted both; have killed snipe, but "niver a b'ar," but came nearly getting killed myself on a bear hunt. But I never could tell certainly whether a dog was good for "b'ar" or snipe till I tried him.

Now don't be selfish, but give to the bee-keepers that "sting remedy." We have but few snakes here. Since the war, 'tis true, there are a few descendants of a kind common at that time, but they are becoming scarcer each year.

Now, Bro. Ben, you and J. R. S., come over some evening, and we will have a camp-fire, and "smoke the pipe of peace." I have been through your State since you were here.

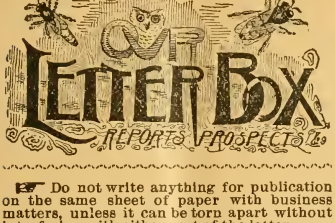
Bees are doing fairly well now (July 2nd). Basswood will bloom in a few days.

Slippery Rock, Pa.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearing"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

Bound in paper cover, postpaid, 65 cents; or given free as a premium for sending us two new subscribers; or clubbed with the BEE JOURNAL a year—both for only $1.40. Send all orders to the BEE JOURNAL office.



☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Sweet Clover Seed and Moths, Etc.

I have been much interested in reading about sweet clover in the valuable BEE JOURNAL, and would like to say that I do know that it will keep moth out of flannel goods. I wish some of the bee-keepers would see if it will do as well with moth in bee-hives. If I had bees I would lay it thick around the hives. It is now in bloom, and the bees are working on it. That is all I know there is for them to work on, as it is so fearfully dry here.

Why can't S. H. Clark write a lecture and have it printed in the AMERICAN BEE JOURNAL? then there would be more of us to learn from it. S. H. was better in school with his pen than he was at speaking when we (he is my brother) went to school in Ohio. We used to go to school to Miss Louisa Barrows when we were small, a long time ago. Miss Barrows was a relative of Mr. O. B. Barrows, of Marshalltown, Iowa. MRS. MARY J. DUNKIN.

Lakeview, Iowa, July 16.

Extracted Honey—Smoker Fuel.

My bees have stored only about 250 pounds of honey (white clover) to date, and it is too early as yet to predict what the Spanish-needle will be. I have had no swarms.

The new department, "Our Doctor's Hints," is very promising. Dr. Peiro seems to have knowledge, and knows how to tell it to others.

I am well satisfied that the advice on page 8, in regard to extracted honey, is the secret of a good market and easy sales for extracted honey. I get 12½ cents for my extracted honey at wholesale, simply because it is a fine article—finer than any artificially ripened honey I have ever seen, and one reason it is so good is because the bees cap over at least three-fourths of the cells before I extract. Even by this method I took 110 pounds from the surplus cases of one colony, and it was a very poor honey year—so poor that out of the 600 colonies of bees in the county, I was the only one who secured a pound of surplus.

Many thanks for the editor's description of Miss Wilson's veil. I could not understand her description, but now I have made one, and it is just "the trick."

I see many different ways of firing a smoker described. I have a Bingham, and I simply throw in a few dry chips, squirt a little coal-oil in, drop in a match, puff it until it blazes good and the chips are well a-fire, then I scratch up enough fine chips, bark, dirt, and whatever comes first (unless too big) to fill up, and there you are! It gives me a good volume of smoke, is easily started, and lasts a long time. The fuel is always handy, if you use wood, and the fuel is easily replenished.

F. H. RICHARDSON.

Laclede, Mo., July 8.

No Swarms and No Honey.

It is very dry here, and bees have not swarmed any this year. I have not had one pound of surplus honey, and no prospect of any. J. M. DENNIS.

Blockton, Iowa, July 17.

Bee-Keeping in East Tennessee.

Bees here looked as though they had been on a strike nearly all summer, until about two weeks since, when the chestnut and sourwood came into bloom, since which they have been storing honey wonderfully fast. I am an old bee-keeper—have been at it nearly all the time since 1866, but I am sure I never saw such a flow of honey from sourwood as we have here at the present time. This country is not nearly so good for honey as in other parts of the State; we have no basswood and but little poplar as compared to other sections, and no white clover.

We have about a dozen or nearly that number of bee-keepers in this county; of course there are a great many who keep bees in old boxes and log gums. We have no county bee-organization. I have talked the matter over to some of the bee-men here, but the past 3 or 4 years have been so bad for the bee-keeper that I get but little encouragement. I think that I will make one more effort.

J. E. C. EASTERLY.

Cleveland, Tenn., July 16.

The Drouth and Honey-Dearth.

"Ben There," on page 85, has evidently been where "planten" and "pussley" grow, and where "the festive mullen raises it head toward the eaves," and where there is "the want of knowledge and its judicial application which resulted in a 'dearth'" of honey; but as in Iowa but little of purslain or plantain grows, and very rarely a mullen stalk raises its head towards the eaves, and as we have a great dearth of honey which we attribute to the great drouth, I suppose "Ben There" would say it was lack of "common sense and earnest work." The fact is, bees wintered splendidly, built up strong, and have been very strong nearly all summer, ready for the honey harvest which never came, except the basswood, and while that lasted they filled the brood-nest so that we are in hopes we will not have to feed sugar, and a very few stored a few pounds of surplus. Very few swarms came off, and so far this is the worst season in many years, with no prospect of a fall flow of honey. But when I look at the prospect of farm crops, I do not feel like complaining.

O. B. BARROWS.

Marshalltown, Iowa, July 23.

Discouraging Experiences.

I still like to read the BEE JOURNAL, although I feel discouraged almost to disgust with the bees in this (McDonough) county. I have kept from 70 to 80 colonies, and this is four failures with the outlook good for a continuance, as clover is our dependence, and owing to drouths or other causes it has about ceased to show up. The merry bee has a lonesome hum to me now, as I recently lost my good "better half." Success to the "Old Reliable." W. M. RAGON.

Macomb, Ill., July 9.

For the Boys and Girls.

I wonder if any of the bee-keepers have any boys or girls. They seemingly don't have any—at least they are seldom ever heard from in the AMERICAN BEE JOURNAL. Father has been a bee-keeper for about 18 years, and I am interested in the bees. We have about 60 colonies, and our crop this season is nothing extra large. It is of good quality, and mostly basswood. I run the extractor this season, and father takes the honey from the bees, and tends to the swarming. Last year I did a good share of the hiving, while father cultivated the corn, but this year I cultivated and father looked after the bees and garden.

Now, if the bee-keepers do have any boys or girls, I would like to see something from them in the BEE JOURNAL, if the Editor doesn't object, and I guess he won't if we write about bees. If you write, perhaps I may get courage enough to write again. CHAS. W. SANFORD.

Ono, Wis., July 21.

[That's right, Charlie. We hope your interesting letter will be read by the boys and girls in the thousands of families receiving the weekly visits of the BEE JOURNAL, and then we trust we all may hear from them. If a sufficient number respond, we may devote a page or two each week to a department in the BEE JOURNAL for the boys and girls, who will some day be full-grown bee-men and bee-women. How does that strike you, boys and girls?

For your encouragement, we want to say that from the top of our head to the soles of our shoes, we believe fully in our boys and girls! May god bless their dear, young hearts, and help them to grow up into good and true men and women!—EDITOR.]

Doing Nicely on Cotton.

Bees are now doing nicely in this county on cotton. G. W. HUFSTEDLER.

Clarksville, Tex., July 24.

Profitable Bee-Keeping, by Mrs. Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 133 for advertising offer.

ESTABLISHED IN 1861 — THE AMERICAN — OLDEST BEE-PAPER IN AMERICA

BEE JOURNAL

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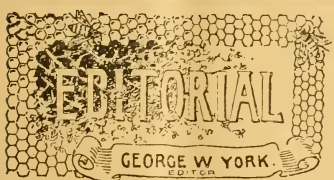


Bees and Flowers is a new 4-page circular just issued by the National Bee-Keepers' Union, 147 South Western Ave., Chicago, Ill. It treats of the relation of bees to horticulture, being a reprint of the valuable and interesting essay by Bro. C. P. Dadant, which we published in the BEE JOURNAL for June 21, 1894. This new circular should be widely distributed in fruit-growing districts, as the facts which it contains regarding the great value of bees to blossoms, are clear and conclusive. We presume you can have as many free copies as you can use judiciously, by addressing the Union as above.

Cotton-Waste for Smoker Fuel.—Mr. L. Highbarger—a successful bee-keeper—says in the *Home Journal* that he uses cotton-waste for bee-smoker fuel, such as possibly may have been used in axles of railroad cars, and saturated with oil. He says it gives the best satisfaction of anything he has tried, and it never goes out. The way to use it is this: "Drop a coal of fire in the fire-box of the smoker; then put some of the cotton-waste on it, give a few puffs with the bellows, and then notice how slowly it burns."

Honey will be Money this year, sure.

Bro. W. C. R. Kemp, of Orleans, Ind., met with a serious accident on Tuesday, July 24th. His horses ran away, and as a result dislocating and fracturing the bones of his left wrist. We can sympathize with Bro. K., as *we* received *exactly* the same kind of an injury 16 years ago last June, having been thrown from a horse on the farm. But *Time* has fully healed the hurt, as he does in nearly all cases, whether wounds of the feelings or body.

Keeping Empty Combs.—Bro. Hutchinson says in the *Review* that combs which he didn't expect to use this season have kept nicely, hung one inch apart in a dark, cool cellar. They have not been fumigated, and he sees no need of it.

Our Visit to Mr. Lyman's.—On the afternoon of Saturday, July 28th, we visited the home and apiary of Bro. Walter C. Lyman, of Downer's Grove, Ills., 20 miles southwest of this city, on the Chicago, Burlington & Quincy railroad. We boarded the train at the Union Depot in Chicago at 12:10 p.m., and arrived at our destination about 1 o'clock, where we found Mr. Lyman waiting for us with horse and carriage.

He lives nearly a mile directly north of town, on a farm of 240 acres. The family consists of Bro. L., his mother (who is 73 years old), and an unmarried sister. Mr. Lyman is also unmarried. He is about 40 years old—certainly old enough to know what kind of a wife he wants, but for some reason (likely well known to himself) he has not, as yet, found this particular one of "Heaven's best blessings."

Mother Lyman is a dear old lady—but

she has a heart as young as the youngest. We did enjoy visiting with her. She is a great reader, and well educated, having attended Oberlin College and taught school in her earlier days. The Lymans are earnest members of the Congregational church, though we felt at once like claiming them all as Methodists—so similar are the larger denominations becoming these days. We're glad of it. All hail, the glorious day, when all the imaginary denominational lines shall have been obliterated, and we shall, as true brothers and sisters, be working in the interest of a common humanity, as well as for a common eternal existence. No bigotry in that, as we can see.

To return to the object of our visit: Of course our object was to see Mr. Lyman's bees, and to study the methods he uses. He has 70 colonies of something like the leather-colored bees. He prefers the 3-banded Italians. His apiary is nicely and conveniently located just to the east of the house—perhaps three rods away. On this same side of the house is a porch which Mr. Lyman has enclosed with wire-screen, to be used as an extracting room, and for other apiarian work. Just at the edge of the apiary, and to the right of the wire-screened porch, he has a large canvas stretched up, which forms a cool, shady place, and under which a part of the work is performed.

He is this year using a bee-escape honey-board, which will be illustrated and described in next week's BEE JOURNAL. He thinks that with it swarming can be almost entirely prevented, and a larger crop of honey secured—that is, when there is nectar in the flowers for the bees to gather. His management as to swarming is much the same as has been described in the BEE JOURNAL by Mr. Demaree and Mr. Dugdale, excepting that he uses the bee-escape honey-board. This is not exactly a new invention, but more an application of known principles in another form.

The season had been very dry, so that the sources of white honey were entirely cut off, and only honey-dew was gathered. His crop of comb honey so far was only about 30 pounds, for as soon as he saw that honey-dew was being gathered, he removed the sections that had been placed on the hives.

Mr. Lyman uses the 8-frame dovetailed brood-chamber with the Hoffman self-spacing frames, and the Heddon surplus case—single-tier wide-frames. His swarms are hived on one-inch starters of comb foundation.

Last year Mr. L. received an award at the World's Fair on extracted honey.

Mrs. Lyman said that "Walter" got his start in bees about 12 years ago, by a stray swarm locating on one of their trees on Sunday. A relative happening to be there, who knew about hiving bees, helped to hive the swarm, and after that the enthusiastic owner studied them, purchased books and papers on the subject, and when he took off his first crop of 75 pounds of honey, it was thought a big thing! From that one swarm has grown the present well-equipped apiary of 70 colonies, which in years before this has produced thousands of pounds of honey in a single season.

We returned home in the evening, feeling that we had spent a pleasant, and, to us, a very profitable afternoon.

Next week Bro. Lyman will tell you about his bee-escape honey-board and its use.

Keeping Surplus Queens.—Bro. Alley, in the June *Apiculturist*, gives his method of keeping surplus queens, in this one short paragraph:

One way to keep surplus queens—either virgin or laying queens—is to place them in nursery-cages, about 35 queens to a frame, and insert the frame in a queenless hive. Here the queens remain quiet and contented for weeks.

Honey-Dew from Texas.—Dr. Wm. R. Howard has sent us this letter accompanying a sample of honey-dew, which he describes:

FORT WORTH, Tex., July 28, 1894.

EDITOR BEE JOURNAL:—I send you by this mail a sample of honey-dew, gathered by the bees and stored as honey. This was gathered from June 30th to July 5th, 1894. It is the first time in nearly 20 years that there has been such a yield from this source. This is gathered from walnut, pecan, live-oak, and a few other trees; the most extensive excretion or exudation being from the walnut and pecan, to which it owes its color and flavor.

About the time (June 15th) the horsemint had begun to yield honey, cold rainy weather set in, and continued for about two weeks. After this, the hot wave, with its simoons, visited us. The wet weather had so stimulated the growth (it being the time of second growth of these trees), the leaves were extravasated with the succu-

lent flow of sap, causing an exudation, called honey-dew, and for five or six days—until the rain washed it off—the leaves were dripping with this viscid liquid. The stuff more resembles new pine tar—greenish black—than anything else. The taste is not so bad, but I consider it worthless—not fit for table use, or to feed bees in winter or spring. I send it more as a curiosity than for anything else. Pass it around.

WM. R. HOWARD.

Thank you, Doctor, for the generous sample of honey-dew. We are "passing it around," but so far no one seems to care to order it in very extensive quantities! It certainly is not fit for table use, as you say. Besides, it is the blackest stuff we have yet seen called "honey-dew." Truly, it is a "curiosity," and we shall preserve it as such.

A Use for Propolis.—E. E. Hasty, in the July *Review*, suggests that propolis can be profitably used in this way:

A sufficient quantity of it melted into the bottom of an old leaky wash-dish, or other played out utensil, makes things lovely again—provided you occasionally set it out in the sun to heal up cracks that may ensue. And in the dire domestic extremity of a leak in the wash-boiler that will not be stopped, propolis is just a "ministering angel." You see it never really melts, and is heavier than water any way, and so will remain at the bottom. Put a generous piece of clean tin over the place, so the clothes cannot get soiled. In applying the stuff, heat the bottom first, and then rub all around and over the leaky territory with a lump of the propolis.

Better Quality Paper Wanted.—One of our subscribers in Michigan wants to know why we don't use better paper in the BEE JOURNAL. To answer his question briefly, we must say it is because we can't afford it, at such a low subscription price as $1.00 a year. And yet we could, if *all* subscribers would *pay their subscriptions*, and do it promptly.

It must be remembered that the BEE JOURNAL has no bee-supply business to lean on, but that all expenses *must* be paid out of the receipts for subscriptions and advertising alone. If *all* subscriptions and advertising accounts were *paid*, and there were no losses whatever, why, of course we could afford to use better paper, more pictures, and improve the BEE JOURNAL in several other particulars. But all people are not as "good pay" as they might be, and others meet with misfortune, so that a certain percentage must be allowed, we regret to say, for both the willful and the unwilling delinquents.

Then, again, how much does one expect to get for *two cents?* For a monthly bee-paper at $1.00 a year, you pay 8⅓ cents a copy; you get *52 copies of the* BEE JOURNAL *for only $1.00—less than two cents per copy!* A good many people seem to think it is worth that, even without a superior quality of paper. But once let *all* who are owing on their subscriptions *pay up*, and *keep paid up*, so we can know what to depend upon from that source; then let each present subscriber send us *just one new yearly subscriber*, before Sept. 1st, and we'll promise to use better paper, and in many other ways improve the old AMERICAN BEE JOURNAL. Will you do it? If *you* will, *we* will.

Our Doctor's Hints.—The new department conducted by Dr. Peiro in the BEE JOURNAL, is meeting with much favor, we are glad to note. Here is what our good friend, R. A. Burnett, thinks of it:

EDITOR AMERICAN BEE JOURNAL.—

Dear Sir:—By adding to the BEE JOURNAL a department conducted by a doctor, you have earned, and will receive, substantial support, by prompt renewals, and new subscribers who will be brought in thereby.

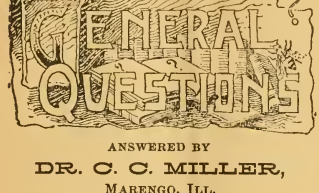
In your issue of July 26th, Dr. Peiro philosophizes on the "Contented Mind," and, in my opinion, does well. In "Bowlegs and Teething," who can tell the numbers of people that will draw comfort, hope and cure, with lots of prevention, therefrom; and then it all goes for the cost of subscription to the AMERICAN BEE JOURNAL!

R. A. BURNETT.

Chicago, Ill., July 27.

We hope that especially the women in the homes of bee-keepers will carefully read "Our Doctor's Hints," for to them more than to any others falls the treatment of the sick or complaining ones of the family. Most assuredly it will well repay the men to read it also, as Dr. Peiro is a man who is acquainted with farm and garden work, and doubtless will always have something to say that will be profitable to even the hired man on the place.

By the way, until further notice, we can furnish back numbers from July 1st (when Dr. Peiro began his "Hints"), so if any of our readers desire to have their friends take the BEE JOURNAL, their subscriptions can begin with July 1st, and thus have all the helpful hints so far published in the BEE JOURNAL.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Honey-Board and Its Use.

1. What in your opinion is the best kind of honey-board to use—one made of a full sheet of zinc, or one made of wood slats with perforated zinc between? By the "best" I mean with what kind of a honey-board will bees store the most honey?

2. Do you think it makes any difference whether the openings in the honey-board come directly over the top-bars of the frames, or whether they come directly between the top-bars? S. D. C.

Seattle, Wash.

ANSWERS.—1. As you put the question, I don't think there's any difference. Possibly it may be just a trifle easier for a bee to go through a perforation when she can have the wooden strip to help walk straight through the hole, but I doubt if the difference would perceptibly tell on the amount of honey stored.

But I think there is some difference when your own time and convenience is concerned. The full sheet is inclined to sag down, so that you do not have it at a uniform distance above the top-bars, and as a result the bees will glue it to the top-bars wherever it comes closer than ¼ inch. For this reason I prefer the slatted excluder.

2. I doubt if it does.

Comb Between Frames and Super.

I have been bothered considerably by my bees building comb between the brood-frames and the super; also building across spaces of brood-frames. Is there any way to prevent them doing so? Your answer may be of use to other beginners. W. A. G. C.

Fremont, Nebr.

ANSWER.—That's one of the things that has had a great deal of discussion and experimenting. Have top-bars 1⅛ inches wide and ⅞ thick, then have them at fixed distances like the Hoffman frame, or else use Stephens' spacers, and have only ¼ of an inch between top-bars and supers, and I think you'll have very little trouble with burr-combs.

If you want to go to the trouble, you can probably make the frames you have do. Very likely you have loose, hanging frames like those mostly in use. Suppose the top-bars are ⅞ of an inch wide and ⅜ thick. Take pieces of wooden separator ⅞ wide and ⅛ thick, and nail on each side of the top-bar. If your top-bars are 1 inch wide, then the strips must be 1/16 thick. Now you have a top-bar 1⅛ wide and ⅞ thick. Very likely there is a space of ⅜ between your top-bars and sections. In that case nail little strips ⅛ thick in the rabbet, and that will make the space between top-bar and super only ¼ of an inch. Then put little blocks about two inches long on each side of the upper end of the end-bars, these blocks having such thickness that your frames will be spaced 1⅜ from center to center. Or, better yet, get Stephens' spacers.

Live or Dead Brood—Surplus Bees.

1. How can you tell live from dead brood when all are capped over? I took out the frames from 2 colonies when looking for the queen, and I think some of the brood chilled, yet I am not sure.

2. What can be done with the surplus bees? I have seven colonies—all that I feel safe in keeping now—yet they continue to swarm, and no sale for bees here. What I wish to know is, what am I to do with those in excess of what I want to keep? F. M. L.

Langlois, Oreg.

ANSWERS.—1. If the brood is capped over, some of it chilled and some not, I don't think you can tell the two apart without uncapping. Uncap it, and then the dead brood will not have the bright, plump, white appearance of the live. Unless you've had a very queer streak of weather, I doubt if you've chilled brood in July, especially in strong colonies. At any rate, the bees will have no trouble in taking care of chilled brood.

2. You can do lots of things. The

question how to prevent increase isn't a difficult one—it's the question how best to prevent swarming that beats us all. You can unite in the fall, although it may be better to do so in the spring. Save your best queen, if there's a difference, in uniting two colonies.

You can take the old-fashioned way of persistently returning all swarms that issue. A good way, too, especially with all after-swarms. For when the second swarm issues with a young queen, one or more other young queens are allowed to issue from their cells, and when you return the swarm there will be one or more deaths, and they can't keep that up so very long. Simply put back the swarm every time it issues.

You can break up any colony you please now. Distribute its frames, bees and all, to other colonies. The old bees, of course, will go back to the old place, but if their hive is taken away they will unite with some of the nearest colonies.

Removing Honey from Cross Bees.

I have 11 colonies of hybrid bees, and they are very cross. I would like to know how to get the sections away from the bees without the bees tearing some of the caps off the honey. Is the Porter bee-escape used for that purpose? If so, how many would I need, and how would I use them? Some of my hives have as high as 100 pounds of surplus already. I think we have a good bee-country here. The bees do their work along the north fork of the Canadian river. Success to the BEE JOURNAL.

Choctaw City, Okla. T. W. P.

ANSWER.—I think the Porter escape would solve the problem for you. I believe printed instructions for use are sent with the escape. With only 11 colonies you will get along very well with a single escape. Of course, you can make faster work with more. The kind of bees you have makes a good deal of difference. The more black blood, the more inclined to tear holes in the cappings when disturbed, while Italians are not likely to do anything of the kind.

Hoffman Frames--Sections--Swarming

1. What size are the Hoffman frames?

2. Can one or two pound sections be used on the Thompson Golden hive?

3. Do bees alway swarm before a young queen is hatched out?

4. I have a dozen Golden patent hives and one dozen boxes. I had 11 colonies last spring and now I have 24. I lost 5 swarms that went to the woods. Would you advise another hive, different and better? or can I use all the late improvements on the hive I now have?

D. S. M.

Lewiston, W. Va., July 24.

ANSWERS.—1. 17⅝x9⅛, outside measure.

2. I don't know what the Thompson Golden hive is, but I hardly think there is any hive in use in this country that will not admit the use of 1 and 2 pound sections. All that is necessary is to have a chance to place them on top.

3. Yes and no. At regular swarming-time, when a prime swarm issues with the old queen, such a swarm generally issues about the time the first queen-cell is sealed, so always before she is hatched out. But sometimes the old queen is superseded at other than swarming-time, or some accident causes the loss of the old queen, and at such times the bees do not swarm before the queen emerges.

4. I'm not competent to answer that question, for I don't know what the Golden hive is. You'll find it a good deal of trouble to change and have two kinds of hives, still there may be enough difference to make it worth while. Can't you make it convenient to see at some neighboring bee-keeper's one of the popular modern hives such as the Dovetail, then you can judge something about the difference, Or, you might get one of the hives yourself, and judge from that.

"Foul Brood: Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

Profitable Bee-Keeping, by Mrs. Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Dandruff—Prevention and Cure.

CHAS. W. SANFORD, Ono. Wis.:—My dear young friend, I am glad you have the right spirit of enquiry to ask questions. It is one of the most effective ways to knowledge, and I shall be glad to hear from readers of the AMERICAN BEE JOURNAL, especially from its younger members. But to your request.

Dandruff is a scaly affection of the scalp, a local irritation by which the superficial layer of skin comes off in bran-like flakes, sometimes proving quite annoying because of its filthy appearance on the clothing. It is a self-imposed punishment for our ignorance and unclean habits. Combs are responsible for most of it, beginning from the day our dear mothers scratch our heads with a fine-comb, and ending with our use of those sharp-tooth machines that irritate the scalp, make small sores, and they in healing, itch, which causes us to scratch, and so the trouble is kept up indefinitely.

Then comes the next worse step—the use of various lotions to stop and prevent the falling particles we call "dandruff." You can rely upon it that all such mixtures are *harmful*, no matter how highly commended. *Let them alone!*

The cure is simple enough. Commence by anointing the head moderately well with vaseline or cosmoline, obtained in any drug-store. It is best put on with a sponge. Do this every third day for about four times. Do not use a comb in arranging your hair. (Ladies should use a wide-tooth comb, with teeth ground very dull.) Men can easily part their hair with a brush. The "knack" of it is soon learned, and is better every way. Indeed, they may practice the old farmer's way—who parted his hair with a *towel*. No dandruff on *that* head!

After the fourth application of vaseline, you will notice the dandruff nearly gone, because the vaseline has healed the sores from which the scales came off. Oils or animal grease of *any* kind are injurious, because it becomes rancid in the hair, and creates more mischief, instead of cure. (You no doubt know that vaseline is a product of coal-oil or kerosene, hence it is called a *mineral* oil.)

Well, after the dandruff is pretty well gone, simply wash your head, every day, in nice clear, cold water, and rub the scalp briskly with your finger ends—*not your nails*, which should always be kept trimmed even with the finger tips—a sure sign of gentlemanly cleanliness.

Now, my good boy, you follow out these directions carefully, and then let me hear from you again. Good-bye.

Treatment for Dysentery.

Dysentery is one of those insidious complaints that come like a "thief in the night," when we least expect it. There are certain times and seasons when this disorder is most likely to manifest itself, and just about *now* is that very time. And it is astonishing what slight transgression, in diet or exposure, may develop an attack! You feel well in the morning, you have worked with a will and overheated yourself and then sat down to cool—that is the first step in its progress. At supper, being hungry, you have indulged in large drinks of water or tea; eaten fatty meats, pudding or pie, and gone to bed. This is the second and effective step.

Your sleep is troubled, some sickness at the stomach sets in during the night, more or less severe colic comes on, and by morning you experience the forcible evidence of what proves to be dysentery—which really means an inability of nature to digest and assimilate the quantity and quality of food you have taken the evening before, and so the contents of the stomach pass, fermented and irritating, into the intestinal canal, and set up an inflammation of its lower portion principally, which results in the pain, prostration, and passing of bloody mucous which we now recognize as "flux."

Unless proper remedies are at once used, more serious consequences may follow. What shall first be done? Garden "pussley" is generally easy to obtain. Take a large handful, wash it clean, boil it in two quarts of water for one hour. When boiled to one quart, take off and strain the liquid through a clean towel. Of this "tea" give a half teacupful in a pint of water as hot as can be taken. It *may* produce vomiting —all the better if it does; but if not, keep right on giving it every two hours, except

when the patient is asleep. If so, let him rest. *Not a thing to eat; he won't starve!*

So keep doing, and in 24 or 36 hours he will feel quite "chipper." But right here is where you patience and good judgment must come to the rescue! He will want to eat your pantry out of sight, but you must insist on giving him, very sparingly, of crackers and milk, or toasted bread well soaked in milk—fed often, and only a little at a time, because—you see?—his stomach must have rest. Cool buttermilk is excellent, if liked.

After the first day's light feeding, the yolk of a boiled egg (not the white!) may be given morning, noon, and early evening, with the usual bread and milk. The third day a simple rice-pudding may be ventured on in addition, and the juice of fresh berries in a little cool water will be relished besides. After that, he will be well enough to take care of himself, with a little caution.

Practically the same treatment applies to children, and if they show symptoms of irritation or nervousness, the hot bath, morning and night, will do wonders in quieting them. But remember, *an excitable nurse is worse than none.*

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Aug.16.—East Tennessee, at Whitesburg, Tenn
H. F. Coleman, Sec., Sneedville, Tenn.

Oct. 16-18.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.

Sept. 11-13.—Nebraska State, at Lincoln.
L. D. Stilson, Sec., York, Nebr.

Sept. 15.—S. E. Kansas, at Bronson, Kan.
J. C. Balch, Sec., Bronson, Kans.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Straw Mats Over the Frames to Keep Off Heat.

MRS. ATCHLEY:—We had bad luck with broken combs once from heat, and lost nearly all our whole apiary. But we have had no loss since we have used the straw mat over the frames, as it keeps the heat of the sun's rays off the tops of the combs. Try them.

CHAS. DADANT & SON.

Hamilton, Ill., July 21.

Thank you, my good friends, for this recipe. It is too good to keep secret, and I have given it to the public, as it may be the means of helping others, as I have had reports from different parts of the country, that their bees were damaged by the hot wave. Yes, I shall try it, and am satisfied that the straw mat will keep out the force of the sun's rays. And it might be well to mention right here, that the bees in this latitude stop work in the sections in real hot weather, unless well shaded, and the straw mat will be a help, or a remedy for this, too. JENNIE ATCHLEY.

Foul Brood and Bee-Paralysis in Australia.

MRS. ATCHLEY:—I think you are quite right as to the origin of foul brood. We have not a single case in this colony, and never had. There is, however, plenty of it in the adjoining and southern colonies. Now, if it would originate in dead brood, we had every condition necessary to propagate it last year. We were then visited by the most disastrous floods ever known in this colony, and a large number of apiaries were swept clean out of existence.

When the washers subsided, *hundreds* of dead colonies were left scattered about, and soon became a *filthy* mass of rotten brood. At this time of the year

the colonies were mostly very strong, and contained a large amount of brood, and with the thermometer registering daily from 90° to 100° in the shade, what more favorable condition could exist for its appearance if it could exist spontaneously?

On page 142 of the AMERICAN BEE JOURNAL you state that salt will not cure bee-paralysis. No, it will not; but if you will sprinkle powdered sulphur over the bees and brood once or twice, you will cure it *every time*, and it *will remain cured*. It must be a very prevalent disease in your county, if more than two-thirds of the bees have fallen before it during the past three years.

On page 814 of the BEE JOURNAL for 1893, you wish you had more photographs of old-time bee-keepers; so perhaps one from a recent-time bee-keeper from a foreign clime, may be acceptable. At least, I trust so. H. L. JONES.

Queensland, Australia, May 16.

Friend Jones, I have been thoroughly convinced for some time that foul brood does not originate in any kind of dead or rotten brood, as it has no appetite for such, and *cannot* start there. It wants live brood to start in, and must have it or it will not start at all. A common filth or air germ will start in dead brood, but a foul brood germ never, as foul brood germs are not floating about everywhere, unless foul brood is there, too, and *must* have a germ from the old bucket to start from.

In regard to the statement concerning bee-paralysis in the U. S., I think you've been badly informed, or the person that imparted to you that information was mistaken. I know it has done damage in some parts of the United States, but I have not seen a case for two years, and none exists in this part of Texas. But I am ever so much obliged for your remedy, and I am sure that those whose bees have it will be proud to know that we have at last found a sure cure, and it will prove a blessing to our country. Will those whose bees have the disease, please try Friend Jones' remedy, and report if it will cure the disease in this country? Some times a remedy will not hold good in all climates.

Yes, I am very glad indeed to own the photograph of such a bright and intelligent young bee-keeper from across the "big pond," and while he may not be such a young bee-keeper, he is comparatively a young man, and one that his country should be proud of. Accept kind regards and good wishes for the success, health and happiness of you and yours in your faraway land.

JENNIE ATCHLEY.

Bad for Southern California.

MRS. ATCHLEY:—I am sorry to have such a bad report to make. In the six counties comprising the southern portion of California, and the best portion of the State for honey, it is almost a total failure—no honey, the drouth having cut it off. Then, to add to this, my bees have the foul brood, and I suppose the dry weather, together with foul brood, will destroy a great many, if not all, of the bees in this community. I am not going to yield to these disappointments, but put forth greater energies, and clear away the wreck, and then try again. JEFF WILLIAMS.

Tustin City, Calif., July 15.

Friend Williams, I am sorry indeed to learn of your sad misfortunes, and trust that you may speedily cure the foul brood, and that you may have 24 inches of rain next winter, which will insure you a fair honey crop.

It seems that our disappointments never come singly, but I think those that bear them bravely, and begin with new zeal, will be the ones that will succeed. I have had several sad disappointments for three years, and my loss more than $500 this year. Still, I am hopeful, and am thankful that the hot wave we had on July 2nd was no worse. I wish to *thank* those friends who have so kindly given us help by sending orders for the queens we had left. Bee-keepers are, I believe, the most ready and willing to assist each other of any class. Still I may be partial, but I speak as I feel about it.

JENNIE ATCHLEY.

Italianizing Bees.

MRS. ATCHLEY:—What is the cheapest and best way to Italianize my bees—80 colonies? ELMER YOUNG.

Grandview, Texas, July 23.

Friend Young, it depends upon how you are situated, about which is the cheapest and best way to Italianize your bees. But if you have no other bees near you, it will be the cheapest to get a few good breeding queens, and rear your own queens, especially if you have nothing else to occupy your time; and then you will be likely to get some rea

and helpful experience by rearing your own queens.

But if you allow drones to fly nearer than two miles, you will be most sure to have part of your queens mate badly. But if you wish to rear your queens and have them all, or nearly all, mate purely, do not allow any drones to fly but the pure ones from your breeders. One good way to do this, with less danger of mismating, is to stimulate by feeding one or two of your breeders, and rear some drones late in the season, when all other drones have been killed off. Then you need not take any pains to keep other drones from flying, as there would be none. In your county (Johnson) you could do this in October and November, and soon Italianize all your bees. You could take away the queens from four or five of your best colonies, and give brood from the breeders, and when you get cells enough for all the colonies, kill the old queens three days before the cells hatch, or three days before you wish to move the cells, then give each colony a queen-cell; and should any miss queens, the operation can be repeated, or the colony will winter all right without a queen.

Now all this is a good deal of work, but if done as I suggest, and late in the fall, you will not lose any honey crop while you are Italianizing; and then the next spring all your young queens at swarming time will be apt to mate purely, if you have no other bees near you. I may have failed to tell you the best and cheapest plan, but this is the course I would follow. See Queen-Rearing in full, in late issues of the AMERICAN BEE JOURNAL.

JENNIE ATCHLEY.

P. S.—You had better keep down all the cells the bees start on their own brood, else you may have a worse queen than before. It is a nice job to keep *all* the cells torn down from a number of colonies. J. A.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

Read our great offers on page 163.

One-Pound or Two-Pound Sections.

Query 935.—Which colony will store the more surplus honey—the one provided with one-pound sections, or the one having two-pound sections?—Iowa.

I don't know. I think the two-pound. —E. FRANCE.

I have not found any material difference, in my experience.—J. E. POND.

I do not think there would be any appreciable difference.—R. L. TAYLOR.

If there's any difference it will be in favor of the two-pounds.—C. C. MILLER.

There is very little difference, if any, in favor of the two-pound.—MRS. L. HARRISON.

Very little difference, the little, if any, being in favor of the two-pound.—G. M. DOOLITTLE.

Other things being equal, I would expect a little more in the two-pound sections.—M. MAHIN.

I never have used the two-pound sections. My opinion is there would not be much difference.—EUGENE SECOR.

It will probably make but little difference, but the advantage would be in favor of the two-pound sections.—DADANT & SON.

I do not believe there would be any difference. The one-pound sections would *sell* better in my neighborhood, however.—W. M. BARNUM.

The one with two-pound sections. But you will have more *finished* sections with the one-pound style, which are always more salable—MRS. J. N. HEATER.

I do not think it makes any difference. I have made up my mind that when bees are disposed to store honey, they will put it wherever they can find space.—JAS. A. STONE.

I have a theory that bees will store more honey in large receptacles than in small ones, but I am not so sure my theory will prove true, if one uses sections with full sheets of foundation, and

tiers up rapidly at the proper time. If the bees are to be left largely to themselves, then I would prefer the two-pound sections for quantity.—EMERSON T. ABBOTT.

Much depends upon other conditions than the size of the sections. My experience is that there is really very little difference, but probably it is a little in favor of the larger sections.—C. H. DIBBERN.

There might be a slight difference in quantity in favor of the large sections, but if the one-pounds were in better demand, I would risk the slight loss incurred in their production.—S. I. FREEBORN.

Conditions being the same, they should store about equal. Though it must be admitted that the more obstructions in the surplus department, the slower the bees are to take to it.—J. P. H. BROWN.

I have never tried this, as I never used two-pound sections. But I find that I can get more comb honey in large frames above the brood-nest, so I believe you might get a little more honey by using two pounds.—MRS. JENNIE ATCHLEY.

There are two points to be taken into account when deciding a question like this, which of necessity involves *condition* as well as quantity. Speaking for myself, I would prefer a little less honey in weight, and have it in good shape. But—answering your question directly, the advantages as to quantity will be slightly on the side of the larger sections.—G. W. DEMAREE.

Continuous Advertising, even if it be only a small announcement, pays the advertiser the best in the long run. Spasmodic advertising, like "spasms" of any kind, is unsatisfactory. To secure the very best results, year in and year out, you must keep your name and business before the public. Only by so doing can you hope to keep from being forgotten when the time comes that your would-be customers wish to purchase what they want.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of this number of the BEE JOURNAL for description and prices.

Review of the Number for July 26th.

Written for the American Bee Journal

BY DR. C. C. MILLER.

Here we have the "Old Reliable," Vol. XXXIV, No 4. Seems a good while since it first started—a little more than a third of a century ago. Many of its readers not born then. Stopped a little while for the war, then went straight along ever since. Been improving, too. Didn't think it would when the present editor took hold of it. Too young. But it did. He's getting older, too. All editors do.

Let's leaf it over. First item, boracic acid is said to be an immediate cure for bee-stings. Never tried it, but would put emphasis on "is said."

NORTH AMERICAN BEE-ASSOCIATION.

Frank Benton, Secretary of the North American Bee-Keepers' Association, is on good ground when he urges *continuous* membership in the society of which he is secretary. There's the weak point in that association. Held together by a rope of sand, members becoming such only if they expect to attend the meetings. One of my old professors used to say, "Yes, any fool can find fault, but the remedy, that's the thing." I don't think I know enough to point out a remedy, but I can take the fool's part, and show some of the faults.

John Smith was a member last year because it was convenient for him to attend, but he'll not be a member again this year, perhaps never. It's too far for him to go if he was a member, and what inducement is there for him to be a member? True, he'll get the report, but he'll have that anyhow in the bee-papers. I understand that in some of the societies across the sea there are advantages that make it desirable to be members even if attendance is impossible, and in Canada I think members get back, in some way at least, part of the

worth of their money. In this respect they out-Yankee the Yankees.

BEES IN A CHURCH—DR. PEIRO.

Look here, isn't that yarn on page 105 just a little steep? Three colonies of bees in three walls of a church, "frequently" the honey begins to run with the heat, "stands in pools about the foundation," and "is readily caught in pans." Whew!

Dr. Peiro talks excellent sense in a very happy manner. The women-folks seem to take very kindly to his department.

BEE-MOTHS—ITALIAN BEE HISTORY.

Does Mrs. Atchley, in her interesting talks, mean to say that they have a bee-moth peculiar to her locality? I have seen worms act as she tells about, but I always supposed they were the common *galleria cereana*. And what does she mean at all when she says, "The worm itself is properly named moth?" Or was the intelligent compositor* venting his spite at her by making her words mean nonsense?

That tussle between Robinson and Baldridge is rather tedious, but since the thing is commenced, it may as well be settled "for keeps."

KEEPING SECTION HONEY.

John F. Gates makes inquiry whether it was D. A. Jones that told about keeping section honey. I think instead of the Jones family it was one of the Miller family. His testimony was exactly in harmony with that of Mr. Gates. Sections kept in attic or garret with no special care. Wasn't it in the same way that Hon. Eugene Secor kept some eight years?

OLD VS. NEW COMBS.

Rev. S. Roese warns against using old, black combs. I wonder just how much there is in that. It would seem that with the accumulation of so many cocoons the walls ought to become thick, but when you actually examine them they appear thin, only the septum becoming thick, and that has nothing to do with the capacity of the cell. He objects to the cells being rounding instead of six-cornered. But isn't it just as easy for the bees to keep it in the proper shape, and if it were best wouldn't they keep it six-cornered? Moreover, Gravenhorst, a distinguished countryman of of Mr. Roese, objects to the way foundation is made—sharply six-cornered—and not rounding *as the bees make it.*

Mr. Roese says every intelligent bee-keeper knows too well that every queen prefers bright combs to dark ones. I always supposed it was just the opposite. I'm sure it has been in many cases that I have noticed. If Mr. Roese will put in the middle of a colony a comb of brood, and then fill out on one side with old, black combs, and on the other with foundation or new combs, he will find the brood-nest extended on the side of the old combs every time, unless his bees are different from mine.

He is right in thinking that bees prefer old combs for storing, but *not* for the sake of leaving the newer combs for the queen. More than once I have put foundation in the brood-nest, and I never knew it to be filled with eggs while the bees put honey in the black combs beside it, but often I have known them to fill the frames of foundation with honey, leaving the black combs for the queen.

Marengo, Ill.

[*Doctor, our "intelligent compositor" is a lady, so she couldn't vent "*his* spite" on anybody. No, she (the compositor) "set it up" in type just as she (Mrs. Atchley) wrote it. Probably Mrs. A. can help you out, Doctor!—EDITOR.]

Awards at the Midwinter Fair.

Written for the American Bee Journal

BY W. A. PRYAL.

The awards on honey at the Midwinter Fair, held in San Francisco, have been made public, and I here give all those I am able to find mentioned in the San Francisco *Examiner*, of the 11th of July. As there seems to be no system followed in making or arranging the list of premiums, I had to hunt among the big beets, squash, apples, oranges, hay, grain, peanuts, etc., all of which are included in the department of horticulture, and in which honey is included. It is really a queer arrangement, and I suppose it will be revised, as must nearly all work done by the management of the Fair.

Mr. J. F. McIntyre, of Fillmore, is given 1st premium on extracted honey.

A. G. Edmondson, of Ventura, 2nd premium on extracted honey.

M. H. Mendleson, of Ventura, is the recipient of a special award (the highest given in any department) on comb and extracted honey.

Inyo Company, of Bishop, Inyo county, 1st on comb honey.

J. Archer, of New Jerusalem, Ventura county, 1st on comb and extracted honey and bee-hive superior workmanship.

Schacht, Lemcke & Steiner, of San Francisco, 1st on comb and extracted honey, said to have been produced in San Diego county.

The honey exhibited in the Nevada State building was given a first award.

The first prize that will be bestowed on the prize takers is a "gold" medal, which the paper from which I have obtained the information above given, states "cost 64 cents each."

All those given premiums are honey-producers except the San Francisco concern, whose display reminded me more of an exhibit of a fruit-canning company.

I feel like poking some fun at the committee on awards for the consideration it gave the only hive exhibited at the Fair. It is hard to tell whether Mr. Archer has a hive possessing superior merits as a bee-hive, or whether the hive is given a premium because it was made up in a special manner for exhibition purposes. From the fact that the committee mentions that it has superior workmanship about it, and makes no other reference to it, I should suppose that the said committee saw nothing more about the hive to justify them in awarding it a gold medal, or as I should suppose, a share in such a medal along with his honey.

North Temescal, Calif.

Making Sugar Syrup for Winter Stores.

BY M. F. TATMAN.

I have had over 20 years' experience as a druggist, and had a good deal of trouble at first in making syrups for the various uses of the store in summer-time, when we used large quantities for the soda-fountain. By the hot-water process we could not always get a uniform quality. If too thick it would crystallize; and if too thin, if not used soon, it would sour.

Many years ago we commenced the cold-water process, and ever since we can make a uniform quality that will keep, I don't know how long—probably indefinitely, without souring or crystallizing.

Our plan is, to take a ten-gallon keg (a barrel could be used, if necessary, in the same way), knock out the head, and with it make a false bottom that will fit inside of the keg, boring the false bottom full of small auger-holes, putting in pegs to hold it up about 6 inches from the bottom of the keg; then take white flannel, about three or four thickness, and put it over the false bottom, stuffing it in around the edges so it all has to percolate; then we dump in granulated sugar, about half full, then pour in cold water and let it percolate in the cellar or some room, and no kitchen or stove mussed up.

The first run we draw off from the faucet below and dump back; after that the syrup is fit for the queen's taste, or the bees either. All you have to do afterwards is to draw off the syrup and add more sugar and water.

We have always fed our bees with this, when they needed winter feeding; with a barrel, a large quantity could be made in a short time.

Rossville, Kans.

[The above article, which appeared first in *Gleanings*, was also copied by Bro. Alley, editor of the *Apiculturist*, who said that it "is well worth $10 to any bee-keeper who has to feed his bees for winter." Let's see, $10 would pay for any leading bee-paper for 10 years, and here is just *one* suggestion that is worth 10 years' subscription! Verily, it payeth to take and read bee-papers.—EDITOR.]

Bee-Paralysis in the South.

Written for the American Bee Journal

BY "NOVICE."

Having noted in the AMERICAN BEE JOURNAL for several issues during the last year, some allusions to this disease, and having had some experience with it myself, I write for the information of those who purchase queens to keep up or increase their stock, and for those who, like Prof. Cook, have had the disease in the apiary, and on the return of hot weather have seen the symptoms almost disappear, and have begun to hope that they have seen the last of the malady.

I have had the disease in my apiary for three years, and have watched it closely. I have tried the salt remedy, together with others, and have seen them all fail. The truth is, in my opin-

ion, the only correct method of dealing with the infected colonies is to destroy the bees, combs and hives, and do it as soon as the first symptoms appear.

I saw the disease make its first appearance in a colony purchased from a dealer in a distant State. It spread from that colony to the adjacent hives, and in the course of the first six months all of my colonies but about two were diseased. The bees lay in heaps before the hives, and the yard was strewn with the dead. They could be found under the flowering trees and bushes, dead with loads of pollen in the pollen-baskets, and floating in numbers on the surface of the river. Hot weather came, and the mortality decreased until I thought, like Prof. Cook, that my bees were all right again. But as soon as the brood-rearing began the next spring, the malady reappeared, and was as bad as ever until summer came again, when all my colonies apparently recovered except one, in which the bees continued to die during the entire season.

This last spring the same thing was repeated, and one-fourth of my entire stock of bees, during the honey-flow, stored absolutely no honey. One-eighth perished outright, and all my colonies suffered except two. At the present time, only an experienced eye could detect the presence of any diseased bees, and that in only about one hive in five. Some of the colonies that were so much reduced in the spring as to appear a bare handful of bees, are now as strong in numbers as could be desired. I fully expect that next year will be a repetition of the same experience.

I am now trying the experiment of re-queening. I have noticed that in every colony where the disease has been very bad, and there has been a perfect recovery, that the old queen has been replaced with a new one by the bees themselves. I have reason to think that the infection is not serious until the queen is attacked, and that then her brood is hatched with the disease well developed in most cases.

In a large percentage of my colonies a few diseased bees may be seen almost any time, but honey will be stored, and brood will be reared, and the colony be strong and populous. But suddenly the last stage of the malady will be reached, the queen become infected, and for all purpose of gathering honey, the colony becomes worthless, until another queen is reared.

I have very little confidence in the success of the experiment of re-queening, but thought that I would give it a trial before doing what I fear must be resorted to in the end, namely, the entire destruction of all the bees and hives in order to put an end to the trouble.

My experience leads me to believe that in the case of the queen, the infection may be latent for a time, and then break out and destroy her and the colony in which she may be. From a colony that had the disease a former year, and had become greatly reduced, and then thoroughly recuperated after rearing a new queen, and which colony then showed no sign of the disease whatever, I took the queen and placed her in another apiary belonging to my brother, distant a quarter of a mile. There was no disease among his bees. In three months this queen had developed the malady, and her progeny died by the thousand until at last the whole colony perished. The robber bees carried the infection to other hives, and my brother's apiary has now several well-developed cases of the bee-paralysis. So I conclude that the infection may be carried by a queen which is apparently in perfect health. That it is so carried, is beyond all doubt.

I suggest that every apiarist, who finds a diseased queen or colony sold him by a dealer, should at once advise the bee-keeping world of the fact, that this particular dealer has sold diseased bees, in order that the unscrupulous vendor may have no further opportunity to spread the disease. I think that the bee-papers should make it a point to keep their readers posted in regard to such matters, and that they should cheerfully publish such notices when offered. I think that no dealer who has bee-paralysis in his apiary, ought ever to offer to sell a queen. It is so insidious in its approach, that the infection may be brought into the hive by robbers before there is much indication of its presence visible, even to a close observer.

Bee-paralysis may not be a serious affection in the North, but it is in this section, killing out some colonies altogether, and so crippling the majority of those affected, that they can store but a small surplus. It is very contagious, and in this climate, at least, the published remedies are of no avail.

Columbia, Miss., July 5.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

"Sugar for Winter Stores."

Written for the American Bee Journal

BY I. W. BECKWITH.

The above is the subject of an article by R. L. Taylor, on page 20, and as bee-keepers are liable to be misled in their desire to economize, allow me to say a few words of caution.

If I thought I could winter my bees on 3½ pounds of sugar syrup, and have the conditions of the colonies all that could be desired the forepart of April, I would extract the honey and trade it for sugar, even if I should have to give nearly 2 pounds for one. But I fear Mr. T.'s "economy" is more fanciful than real. In fact I do not believe any colony of bees can live during the winter and until the forepart of April on 2¼ pounds of any kind of food, as some of his did, and then be in condition that would suit me.

As Mr. Taylor has told us nothing to the contrary, I must conclude that syrup is not conducive to breeding, and by April I expect my hives to be pretty well supplied with young bees; and if Cheshire is correct in his experiments and conclusions, those bees could have reared but about three ounces of young, even supposing the old bees did not consume one drop for their own subsistence.

If he had told us the comparative condition of the two sets of bees in the spring, or will report the work they do during summer, there would be more knowledge gained from his experiment.

As the syrup which he fed was pure carbon and water, and as honey is the same with the addition of a small amount of other food, the bees could not require much less sugar than honey, and could rear no brood on syrup alone.

Ft. Lupton, Colo.

Bee-Stings—A Forced Admission.

Written for the American Bee Journal

BY EMM DEE.

DEAR MR. EDITOR:—You may not have forgotten a communication from me some months ago, in which I so glowingly eulogized the noble perspicuity of the honey-bee; their remarkable intelligence, and their artistic sense of colors and smells. And, inadvertently, how much more wholesome and seductive are the odors that emanate from *some* persons (here I blush to think *I* was one of them), and hence their charm against bee-stings.

Well, I take it all back; I beg to assure your thousands of readers that in view of present experiences, that enthusiastic statement was all a mistake! My convictions have received a terrible shock! My confidence in the placid temper of the busy bees, has been enormously modified by abundant and *pointed* experiences! I imagine my former article occasioned a broad smile on that practical prince in bee-culture, Dr. Miller, which a false pride makes this confession the more heroic because of what I now imagine his wise look, and his tell-tale wink of "I told you so" implies. But I suppress all personal consideration of weakness to candidly admit my egregious mistake, and further assure you that I am no exception whatever. Indeed, I am exceedingly vulnerable to their stinging arguments—yes, and even admit that I must have become, of late, the special target for their venomous attacks!

Woe is me! that I should have misled any one to believe that their arsitocratic blood is proof against the assaults of these aggressive "critters;" that by a more fragrant odor of their gentler nature immunity can be enjoyed from the striking force of the poetic bee! Nay, my brethren, there's nothing in it! Your blood and smells have nothing to do with the case. No matter where you were born, or what particular stock you came from, you've just got to take the medicine the bees have to give you, and no argument of inheritance, whether of rank or wealth, will in the least avail in the actions of these hot-ended "varmints." Else why should *I* have been stung in this swelling fashion? Farewell, false hopes, farewell!

Your penitent,

EMM DEE.

Yellow Jasmine of the South.

Written for "Gleanings in Bee-Culture"

BY DR. J. P. H. BROWN.

The yellow jasmine (*Gelsemium sempervirens*) is a creeping, twining vine that grows in the southern portions of the United States from North Carolina to Mexico. It grows more luxuriantly on light sandy uplands than in alluvial bottoms. It blooms in February and March, depending upon locality—earlier further South. When in full bloom it presents a beautiful sight with its yellow

trumpet-shaped flowers, covering the small bushes, often hanging in festoons, and twining around the trees, filling the air with strong yet pleasant perfume. Its duration of flowering is about two weeks, depending much upon the weather. When there are heavy rains and much wind, the blossoms fall.

It belongs to the natural order *Loganiaceæ*, and is described botanically: "Stem twining, smooth and shining; leaves perennial, opposite, lanceolate, entire, dark green above and paler beneath; petioles short; the flowers are in axillary clusters of a deep yellow color, and fragrant; calyx five-parted, corolla funnel-shaped, with a spreading border, five-lobed, nearly equal; anthers oblong, style long and slender; stigmas two, two-parted; capsules elliptical, flat, two-valved, two-celled; seeds flat, attached to the margin of the valves."

The Poisonous Honey-Plant of the South.

All parts of the plant possess poisonous properties. Drs. Wood and Bache, in their "United States Dispensatory," describe the poisonous effects as commencing "with sensations of languor with muscular relaxation, so that the subject finds some difficulty in moving the eyelids and keeping the jaws closed. More largely taken it occasions dizziness, dimness of vision, dilated pupil, general muscular debility, and universal prostration."

Prof. T. G. Wormley obtained an alkaloid extract from the plant, which he termed "gelsemine"—a powerful poison. One-eighth of a grain injected into a strong cat killed it in one and a half hours.

Dr. W. H. Burt, in his work on "Materia Medica," remarks in regard to the poisonous effects of gelsemium:

"The retention of consciousness until very late in the poisoning, both in man and in the lower animals, shows that the drug has very little power over the higher cerebrum, although the drowsiness and the final loss of consciousness prove that it is not entirely devoid of such influence. The two most prominent symptoms caused by the drug are the convulsions and paralysis."

The hive-bee will work on the bloom; but it seems more from necessity than choice; for, when other forage is accessible, you rarely see a bee on it. The Italians frequent it much more than the blacks; in fact, it is rare that you see one of the latter on it. The flower yields

more pollen than honey; and what nectar is gathered is used up in breeding, so it is seldom that any is stored. Still, we have many cases on record where it had been stored, and, when eaten, caused all the symptoms of gelsemium poisoning.

It is very easily told when bees are working on gelsemium. The flower, being trumpet-shaped, they have to crawl in to get access to the pollen and nectar; and in turning around, their whole body becomes coated with the bright-yellow grains of pollen.

Whether the product of the jasmine-blossoms has any poisonous effect upon the bee is a question that has been discussed to a limited extent, *pro* and *con*. Those who took the negative side of the question were mostly persons who knew very little about the plant. To arrive at correct conclusions in a matter of this kind requires a long-extended observation, assisted by many demonstrative experiments. I have been conducting observations for the last 25 years, to determine this question, and I am satisfied that bees are susceptible to the poisonous product contained in the gelsemium bloom. At first they seem to be taken with a sort of shaking, or convulsion; the abdomen swells; they tremble, and either crawl or are carried out of the hive. If the colony is strong, half a pint to a pint of dead bees can be found in front of the entrance every 24 hours. Your black colonies will show very few. The trouble will be kept up during the duration of the bloom, and cease as soon as the flowering is past. The affliction (if I may so term it) is less perceptible during a stress of bad weather. It can also be controlled by feeding or by drawing the attention of the bees from the bloom.

As formerly stated, as quoted from the highest medical authorities, the poisonous effects of gelsemium are more perceptible on the nervous ganglia than upon the cerebrum. This, no doubt, explains the susceptibility of the bee to the action of this poison, as the nervous system of the bee consists in a great measure of a series of nerve ganglia.

Augusta, Ga.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

☞ "The BEE JOURNAL is just what every bee-keeper ought to have."—Frank Gruner, of Wisconsin, July 27, 1894.

Feeding Bees Inside the Hive.

Written for the American Bee Journal

BY EDWIN BEVINS.

I had two colonies of bees last spring which I desired to have swarm early and often (just as some persons are told to vote), and for that purpose I commenced stimulative feeding about the middle of May. I did not like to feed at the entrance, and I thought it would be a good deal of trouble to feed in the hive. I had seen no method described to feed above the bees and at the same time confine the heat. To do this, I took a piece of two-inch plank, six inches wide, and long enough to fit loosely in an empty super when placed across the frames of the hive. With an axe I cut out one side of the plank, so as to make a trough that would hold nearly a pint, then I nailed strips across each end of the trough, so as to make a bee-space between it and the frames, and then made a bridge a trifle wider than the trough, with end pieces just wide enough to give a bee-space between the trough and the bridge.

The trough I placed in a super across the front end of the hive, leaving space for the bees to enter between it and the end of the super. I then put on the bridge close up to the end of the super, and placed a partly-filled chaff cushion over the frames behind it. The unfilled end of the cushion was laid over the bridge. When I wanted to feed, I turned back this unfilled end, raised the bridge up against the end of the super, and poured in the feed from a gallon measure. I never lost a bee by drowning. If any bees were in the trough a puff or two of smoke hustled them out.

There are probably better methods of stimulative feeding, but none other occurred to me when I wanted to feed, and this answered its purpose very well. I fed at intervals of three or four days until it was time for the honey-flow to begin, but when that time came, there was no honey-flow, and so I had my labor for my pains, so far as increase is concerned.

There has been a little honey coming in since about the 20th of June, and the colonies thus treated will give me all the surplus I shall get this season. The hives were overflowing with bees early in June, but seeing that I was to get no swarms, I put on sections about the 20th, and these two colonies have just about filled a 24-pound case each. One other colony of Italians treated similarly

has done just as well. Blacks and hybrids equally strong have done little or nothing in the way of surplus.

There will be but little honey gathered in southern Iowa this season, and there will be no increase at all of colonies. If this drouth continues much longer pancakes will have to be sweetened with sorghum molasses, as there will be no corn raised to pay for sugar. Sorghum is a drouth-resisting plant, and there is a small show for that to make a crop. Hurrah for sorghum, and down with the sugar trust!

Leon, Iowa, July 16.

Some Short Mistakes in Bee-Keeping.

Written for the American Bee Journal

BY CHAS. L. STRICKLAND.

To think that the man who never made a success at anything tried, will make a success with bees.

To try to keep 100 colonies where 50 would starve.

To neglect to give the bees proper care in spring and fall—in fact all the time—and hope for generous returns.

To neglect to put the bees away into winter quarters in good condition, then expect to find them strong in the dawn of early spring.

To rob them of their stores too late for them to replenish, thus causing them to starve, then blame them for perishing, and curse your luck.

To try to use all patent hives and appliances because some oily-tongued agent tells him to, and expect to succeed.

To ventilate his hives with cracks in the roof and knot-holes in the bottom.

To keep plenty of weak colonies on hand, and expect to escape the ravages of the comb grub by using a moth-proof hive. "Nonsense!"

To fail to put on the surplus cases at the right time, then blame God, nature and the bees for no surplus. "Watch, work and wait," must be your motto in hoping for success.

To let the grass and weeds grow so rank around the hives that the bees can't find them, then expect to become a prince in the business.

To use old-fogy dog-box hives, whose internal mechanism you cannot view without cutting out the combs, then expect to become scientific.

To allow dirt and filth to accumulate on the bottom-boards of the hives, as a hot-bed for the propagation of moths.

To buy an extractor before you know what to extract from—one-pound sections or brood-nest.

To boast of your knowledge—talk about drones laying eggs, and the queen being the king-bee.

To try to keep bees and not take a good bee-paper, and have some books on bee-culture at hand, with which you are well acquainted, and think yourself a bee-master.

To expect to reap wonderful results with bees, without labor, knowledge, patience and costs. "No excellence without labor."

To become cranky, and think no one else keeps bees as you do. This is a progressive age.

To grumble because you have to feed your bees some seasons. Don't you feed and care for other kinds of stock? To expect to derive an income from your bees with no outlay, is not "according to Hoyle," and won't pan out.

Maryville, Mo.

Moving Bees a Long Distance.

Written for the American Bee Journal

BY JOHN A. BALMER.

It was a long journey my 14 colonies of bees took, leaving Vincennes, Ind., on May 15th, and landing at Pullman, Wash., on May 24th—2,300 miles on a freight car. They were shut up on the 14th, and not opened until the 25th, making the duration of their confinement eleven days.

Now you want to know how they stood the trip? First, let me tell how they were packed.

All were in dovetailed, 8-frame hives, Hoffman frames. I nailed on the bottom boards, and tacked a strip of wire-cloth across the entrance. The hive cover was removed, cloth taken off the frames, and a special frame fitting the top of the hive, and entirely covered with wire-cloth, was securely nailed on. The end-pieces of the frame on which the wire-cloth was nailed, projected one inch higher than the sides—this to allow the hives to be stacked up, and still allow plenty of ventilation for the bees. The brood-nest was disturbed to the extent of taking out three frames, and empty ones put in their places, *a la* Jen-

nie Atchley. This to give them more air and room.

I chartered a car, put in all my household effects, horse, dogs, bees, etc., and an attendant went with the stock. I put a sponge on top of the wire-cloth covering each hive, and instructed the man in care of the stock to wet these sponges every day. As the hives were very light in stores, and the broood-nests were filled with brood, I sent along a large tin of honey, and ordered a little of this put on top of the wire-cloth each day.

The weather was exceedingly warm when they were nailed up, and the first two days of the journey was also very hot. The balance of the way the weather was cool. None of the frames were wired, and the combs were a mixed lot, old and new.

On opening them at Pullman, all were in very bad condition; four of the colonies were dead, the combs having melted down. In the remaining ten hives there were more or less dead bees. Nursing seemed to have been neglected, and the young bees suffered in consequence. All the queens had stopped laying, and it was quite two weeks after they were set down here, before the queens regained their accustomed inclination to lay. Three of my best queens were amongst the ten that were saved.

One thing is in our favor here—we are first on the ground with bees—no bees nearer than Snake River, 18 miles away. No trouble to weed out black blood here.

Later I may tell how bees do in the far-famed Palouse valley. If bees could gather honey from wheat, the country around here would be a bonanza for the bee-man!

Pullman, Wash., July 23.

Back Numbers.—We have quite a good many odd numbers of the BEE JOURNAL on hand, running back for perhaps 10 years. We have had some enquiry for such back numbers, and have decided to let them go at *one cent per copy*, postpaid. Any new subscribers who would like to see such back copies of the BEE JOURNAL can send us any number of cents they wish, and we will mail them as many copies, all of different dates. Please say, when ordering, back of just what date you would like to have them. It must be previous to Jan. 1, 1894.

Great Premium on page 190!

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Best Honey-Flow for Years.

We are having the best honey-flow that we have had for years. The basswood is furnishing more nectar than I ever knew it to yield before, but the dry weather at present will cut the fall crop short. OTTO BANKER.

Golden Gate, Minn., July 30.

Dry Weather—But Little Honey.

I have about 80 colonies, and the weather is the dryest it has ever been here—so old settlers say. The pastures will burn. I got a little honey from basswood—that is the only surplus. Basswood bloomed very heavy, but did not last long. A. E. COOLEY.

Mt. Hope, Wis., July 29.

Fair Yield from Basswood.

We had a fair run on basswood, but aside from this we have had very little honey this season. There has been more than usual buckwheat sown, owing to our extreme wet when the other grains should have been sown, so we are hoping that the bees will fill up for winter, at least, from this source.

G. M. DOOLITTLE.

Borodino, N. Y., July 30.

Fair Bee-Season—Basswood Bloom.

This season for bees has been fair. The forepart of the season was poor, owing to clover being winter-killed. So there was nothing for bees to work on until the last of June, when they began to gather honey from a bush called "nine-bark" or "buck-bush," which kept them in working trim until basswood bloomed. They worked on basswood blossoms about 10 days, gathering considerable honey during that time;

then the blossoms fell off, and the bees have been working on those old, dried-up blossoms on the ground for ten days, and they seem to have gathered more honey from them than they did when they were on the trees. The nectar that had been secreted in the blossoms while on the trees had remained in them and fell off, instead of being washed out by rains, as is usually the case when we have rains; (but we have dispensed with those wet, nasty things called rains, and for six weeks have been doing without them!) The dew falling on these dried blossoms has moistened them enough so the bees could sip the nectar from them. WM. H. BRIGHT.

Mazeppa, Minn., July 30.

Very Satisfactory Season.

The spring was cold and wet, but the weather came around all right after a time, and white and Alsike clover and raspberry blossoms were abundant in their season. The yield of honey from these sources was about all that could be desired, while since basswood opened up (on July 13th) the bees have been in ecstasies. Taken all together, the season has been very satisfactory.

E. W. CHAPIN.

Marion, Mich., July 28.

Experience and Honey.

I have just taken off 150 pounds of white clover honey in one-pound sections. I have four colonies, and had one swarm this year. The bees are still working in the sections. My neighbors say I can't learn anything out of bee-papers. They have had 40 years' experience and don't want any paper to tell them anything. They have the experience and I have the honey.

CHAS. J. BECK.

Redding Ridge, Conn., July 31.

Bee-Keeping in Maine.

Never having seen anything in the columns of the BEE JOURNAL from this section, I thought an attempt from a small source might induce some of the bee-keepers here to send in something of interest.

Though our summer seasons are short, they make up for it with a nearly continuous succession of honey-producing blossoms, and a good honey crop is assured. White clover and Alsike bloomed profusely, and a weed, commonly called "fire-weed," furnishing a beautiful white honey of mild flavor, is just coming into bloom.

One of our most prominent bee-keepers, Edward Tarr, of "Haystack Apiary," had his first swarm on May 31st, with 25 pounds of surplus honey from willow, maple and dandelion early in June from one colony. I think Mr. Tarr could furnish much of interest to the readers of the BEE JOURNAL in this section, at least.

I had a swarm issue on June 15th that I hived in a 10-frame Simplicity hive, with starters. In a few days I gave them 48 pound boxes with starters. On July 21st I took off 40 pounds of honey, all nicely capped. The parent colony has 40 pounds nearly ready.

I find the AMERICAN BEE JOURNAL indispensable. O. B. GRIFFIN.

Caribou, Maine, July 23.

Bees Did Very Well.

Bees did very well here till within the last two weeks. They have stored all the way from 25 to 100 pounds of surplus honey to the colony.

WM. PLYMELL.

Choctaw City, Okla. T., July 30.

Nothing But Honey-Dew.

Never before in my experience of 16 years' bee-keeping have I had reason to complain of the quality of honey produced in southern Indiana; but this season "caps the climax." Honey-dew in its purity! That, and that only, is the product of the honey crop in this part of the State. The cold, wet spring prevented the usual supply of fruit-bloom and poplar, and left nothing but honey-dew to be gathered, and not much of that. It has been the poorest season I ever knew, but I am not so much discouraged, and will still "Hope on, hope ever." W. C. R. KEMP.

Orleans, Ind., Aug. 1.

A Full Crop of Comb Honey.

It has been excessively dry, and I fear bee-keepers on this side of Ontario have suffered, having visited several, and have had several communications reporting short crops—about one-half of last year's, which is poor encouragement for the business.

I am happy to state that I have a full crop of comb honey, an average of 77 4¼x4¼x1⅝ sections per colony, and

have extracted 100 pounds per colony, with the supers full on the hives, ready to extract. Sweet clover is good for three weeks yet. I wish you could see our pasturage now. The Island is as white with clover as the paper I write on. I have been successful in mating every queen so far this season, having four times the number of drones of any year since I commenced.

In looking across the lake I see the appearance of a storm in the south—may it reach us before morning and cheer the thirsty ground!

JOHN MCARTHUR.

Toronto, Ont., July 21.

Poor Season—The Sulphur Cure.

This has been a very poor season for honey. The drouth last fall and frost in March killed nearly all the white clover in this locality. I have 10 colonies and have only taken off about 100 pounds of honey, and prospects for more are not flattering, the weather being very dry.

I had two colonies that had the "nameless bee-disease;" I tried the sulphur cure that I saw in the BEE JOURNAL, and am glad to say they are all right now. There is no sign of the disease left. I could not think of keeping bees and not take the "old reliable" BEE JOURNAL. N. W. SHULTZ.

Shreve, Ohio, July 30.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

Bound in paper cover, postpaid, 65 cents; or given free as a premium for sending us two new subscribers; or clubbed with the BEE JOURNAL a year—both for only $1.40. Send all orders to the BEE JOURNAL office.

Have You Read page 163 yet?

Honey & Beeswax Market Quotations.

ALBANY, N. Y., July 12.—The honey market is not fairly opened yet, but there is some demand and we think we are going to have good sales. We quote: White clover, new comb, 14c.; extracted, 7c. H. R. W.

BUFFALO, N. Y., May 14.—Trade is very slow, and we have still a liberal stock on hand. We quote: Fancy comb, 13@14c.; choice, 11@12c.; dark and common grades, 8@9c. Beeswax, 25@30c. B. & Co.

CHICAGO, ILL., July 27.—The new crop of honey is coming to market in small lots so far, but many consignments have been of high character, and sold at 15@16c.—this for white comb, properly packed in small cases with a glass exposure on one side. Extracted without special change—brings 5@7c., according to color and quality. Beeswax sells readily at 23@25c. R. A. B. & Co.

CHICAGO, ILL., July 28.—We have received a few shipments of new comb—fancy stock for which we obtained 16c. It is impossibe to advise shippers at this early da e as to the disposition of their stock. We would advise, however, not to be too anxious to place their honey on this market until say the middle or last week of August. Owing to the severe hot weather and dull business at present, it would sell slow. We quote: Fancy comb, 16c.; No. 1, 15c Extracted, 7c. Beeswax, 24c. J. A. L.

CINCINNATI, O., July 18.—Demand in general is slow for all kinds of honey, but we have made large sales lately of choice white comb honey of last year's crop, clearing out our market. We quote: Choice white comb, 12@14c. There is a slow demand for extracted at 4@6c.

Beeswax is in fair demand at 20@23c. for good to choice yellow. C. F. M. & S.

NEW YORK, N. Y., May 25.—New crop of Southern honey is arriving freely. The market is well supplied and demand very light. We quote: Common grade, 50c. per gal.; choice, 55@60c. Beeswax is firm at 28c H. B. & S.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

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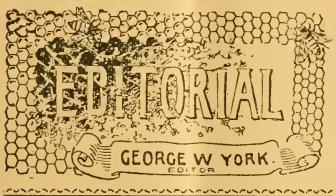


Ignorant Men were acknowledged by all at a recent bee-convention, to be the bees' worst enemies. Education would cure that.

"The Good Die Young," was very appropriately quoted in the obituary notice of *Success in Bee-Culture*, which died of "starvation" recently. Starved for want of support.

"Expenses are sometimes profitable—saving is sometimes extravagance." This is another of Bro. Hutchinson's epigrammatic sayings, given in the July *Review*. He has been guilty of such things several times lately. But seeing it is short and so full of truth, we'll have to forgive him again.

Editor Stilson, in the August *Nebraska Bee-Keeper*, urges everybody in that region to go to the State bee-convention at Lincoln, on Sept. 11th to 13th, so as to "get enthusiasm to want to attend the North American at St. Joseph," on Oct. 16th to 18th. That's right, Bro. S. We must surprise President Abbott with such whopping swarms (of bee-keepers) as he never dreamed of during his worst attacks of nightmare!

Editor Holtermann and family of five were all shown on one page of *Gleanings* for July 15th. Now Bro. Holtermann, and also Dr. Miller, want Editor Root to present in *Gleanings* his family, and that of the Associate Editor (Ernest R.) and *his* family, for, as Bro. Root said, "When we know a man so well, it is always interesting to know how the members of his family look." Gracious, but won't that be an illustrated number of *Gleanings*, if *all* the Roots and Root-lets are in it? Dr. Miller suggests: "If you can't get them on one page, take three pages." We would say, put only *one* on a page, even if a dozen or two extra pages would have to be added. Each succeeding page will then have upon it a glad surprise, well and handsomely Root-ed!

Somnambulist, in the August *Progressive Bee-Keeper*, gives our new department —"Our Doctor's Hints"—an exceedingly kindly and generous notice, and also copies some of Dr. Peiro's excellent hints. Thank you, Bro. Sommy. You certainly have shown very clearly that you know a good thing even if you see it in your sleep.

Dr. Peiro suggests that Somnambulist is pretty wide awake. Dr. P. extends a fraternal Missouri shake!

Not a "Sockless Jerry."—Here is one of Dr. Miller's "libelous" "straws," which appeared in *Gleanings* for Aug. 1st:

A libelous editorial in the AMERICAN BEE JOURNAL gives the whole of my wearing apparel as "hat, shirt, overalls, shoes." Notwithstanding the honey crop, I still luxuriate in stockings.

Then Bro. Root helped to make the straw still more libelous, by adding: "Perhaps

Bro. York was thinking of Sockless Jerry!" If we remember correctly, in the editorial in question we described *our own* "dress suit" when *we* worked on the farm. Besides, we are very certain that we looked at Dr. Miller several times, and we are *sure* we didn't see any "stockings" on him. Mind you, we don't say he was "sockless," but he must remember that we don't look through two pairs of "eyes" yet, as he does, and so could not expect to see through cowhide shoes!

Better believe we're glad we are 66½ miles away from that "libelous" "Stray-Straw" "Sucker" and his electric rawhide!

Three Honey-Plants.—Mr. J. E. Prichard, of Port Norris, N. J., writes thus:

I send you samples of our bee-plants. Please name them for me in their order. No. 1 is nearly done blooming, No. 2 is just in its glory, and No. 3 is not yet in bloom. It has a purple flower, and leaves a seed-ball about ¼ inch square. They are all good honey-plants, and abundant in the swamps.

J. E. PRICHARD.

The plants you sent for naming are as follows:

No. 1. *Cephalanthus occidentalis*—button-bush.

No. 2. *Clethra alnifolia*—sweet pepper-bush.

No. 3. *Decodon verticillatus*—swamp loose-strife.

In the Queen's Domains is the suggestive title of a captivating two-page article on bee-keeping written for the uninitiated, by our esteemed friend, Hon. Eugene Secor, of Forest City, Iowa. It appeared in the August number of *The Midland Monthly*—a prosperous and wide-awake periodical (somewhat after the style of the *Century*), published at Des Moines, Iowa. Bro. Secor's portrait done in delicate half-tone, and printed on enameled paper, with those of other contributors, grace the front pages of the August *Midland*.

Introducing Virgin Queens.—Bro. Alley's plan of introducing queens, as given in a recent issue of his *Apiculturist*, is described thus:

After the bees are in at night, say half an hour before dark, the entrance is plugged by a plantain leaf to prevent the bees from coming out, and to keep smoke in. Tobacco smoke is then blown into the hive, and the virgin queen introduced at once. It is all done in less than one minute's work to each queen.

Fertilized queens can be introduced in the same way, when the circumstances make it necessary to introduce a queen quickly. We have introduced hundreds of them in the same way.

We have gone into an apiary right at a time in the day when bees were working in full force; temperature at 90 degrees in the shade, and changed queens by driving out the old queen and introducing the new one at once. It can be done by fumigation with tobacco, and in no other way that we know of.

Of course one must have a fair amount of experience in this work, in order to be successful in all cases. It can be done, however.

Sweet Clover "Straws," from Marengo, Ill., as follows, were found in *Gleanings* for Aug. 1st:

Sweet clover stands up bravely through the terrific drouth. While grass is burned brown as in winter, sweet clover is bright and green, the bees working on it all day long, except in the morning, when perhaps they work on cucumbers.

Sweet clover that was cut early, and sprung up again, seems more fully visited by the bees than the big stalks that were left untouched. Where people persist in cutting it down on the roadside, leaving all other weeds standing, it would be a good thing to get it cut before any sign of blossom.

During the past year we have published some fine testimonials in favor of sweet clover as a honey-plant, and especially as a drouth-withstander. It seems to us that bee-keepers ought to see to it that seed of this plant, as well as others, should be scattered widely in waste-places and elsewhere, so that at least a small crop of honey would be assured every year. Farmers provide pasture for other farm stock—why not for the bees?

Initializing the Bee-Papers, when referring to them in public print, is certainly meaningless, if not actually discourteous. Bro. Root thinks that in such matter as "Stray Straws," where the names of the different bee-papers are referred to so often, "a shorter way of indicating them seems almost indispensable." Suppose we grant that. Then to be consistent, whenever Bro. Root there refers to the AMERICAN BEE JOURNAL as "A. B. J.," he should use "*B.-K. R.*" for *Bee-Keepers' Review*, "*P. B.-K.*" for *Progressive Bee-*

Keeper, etc. But we notice that when the name of any bee-paper is to be abbreviated in *Gleanings*, it is nearly *always* the AMERICAN BEE JOURNAL!

And to agree with the editor of *Gleanings in Bee-Culture*, whenever *we* refer to *his* paper we should use the letters "*G. I. B.-C.*" And wouldn't that be nonsensical enough!

To state a fact, we are heartily *tired* of having the AMERICAN BEE JOURNAL referred to as "A. B. J." in public print; but if our brother editors really can't afford to spare the space to give full and intelligible credit when copying anything from our paper, why, we'll try to endure it. At the same time, we will endeavor to "return good for evil" by crediting other bee-papers in a sensible and rational way for whatever we copy from them.

P. S.—We would not object to "Am. Bee Jrnl." as a contracted form of "AMERICAN BEE JOURNAL," if a contraction must ever be used, which is very seldom.

Golden-Rod.— Miss Helen Johnson, of Connecticut, at the State bee-meeting last May, gave some interesting facts regarding the golden-rod as a honey-plant, the result of her researches on the subject. She said: "There are 94 varieties of golden-rod in this country, 92 of which are natives, and all afford nectar. The color is white and straw—never amber, as is sometimes stated—but always food for bees. The white variety blooms first, and is usually found in the woods." So says an exchange.

Australia Ahead on Honey.—In the following clipping from the *Western Post*, an Australian paper published in Mudgee, near Sydney, is shown the most wonderful yield of honey from one colony of bees yet heard of, viz: 1,250 pounds in a single season. Here is the item which was written on April 2, 1894:

I had five or six colonies that produced over 1,000 pounds each of honey one season, but I have only two down in my memorandum book, whose extracting I put down every week after they had collected about 400 pounds each. Since then I extracted some weeks as high as 80 and 90 pounds from them during a very long and good season (nearly six months), and the result at the end of the season was 1,250 pounds and 1,120 pounds, and I am sure two or three other colonies went very close to it. I put down in my yard-book how many tins I extract every day, and I always take a low estimate of the weight. The top-weight hive was a light hybrid, and swarmed once. The second was a pure lot, an October swarm, and I deprived them of a good many combs for queen-rearing. The honey came in so fast that I had to extract nearly all the frames in 20-frame hives to give the queens room to lay.

The last season has been very indifferent, and I got an average of only 85 pounds per colony (spring count), the lowest for the last eight years. Since Christmas there has been very little chance of collecting honey on account of the windy, rainy, wintry weather.

On page 18 of the BEE JOURNAL for July 5, 1894, Mr. Doolittle records a yield of 566 pounds from one colony, and on page 50 of the BEE JOURNAL for Jan. 11, 1894, Dr. Gallup tells of a yield of 750 pounds. These probably are the largest yields reported in this country, as having been taken from single colonies in one season. So we'll have to award the prize to our Australian brethren, though it should be remembered that they have a continuous honey-flow for nearly a year, making a much longer season than we have in this country.

☞ The greatest enemy to the pursuit of bee-keeping is the one who extracts unripe honey. Often it ferments, and ruins a good market.—*Newman.*

The North American.—We have received the following from President Abbott, which we commend to the careful, as well as prayerful, consideration of all wide-awake readers:

The articles of incorporation of the North American Bee-Keepers' Association (which it would not be a bad idea for all the bee-papers to publish in full) adopted at Keokuk, say:

"This Association shall consist of its officers, life members, delegates from affiliated local associations, and ex-Presidents."

They then set forth the conditions on which bee-keepers may become life and annual members, and say that "delegates from affiliated local associations shall be admitted free." It is further stated that any "State, District, Territory, or Province in North America may become affiliated upon the annual payment of $5.00, which shall be due on the first day of January in each year, in advance."

I would like to learn now how many there are of these "affiliated" associations at the present time. I see a list of eight is given in the Report of the meeting at Keokuk, but I find nothing in the last Annual

Report to indicate that there were any "affiliated" associations at that time. If not, why not?

Then, again, what benefit is to be derived from becoming "affiliated?"

These are merely questions thrown out to provoke an expression of opinion, if possible, on the part of our leading bee-keepers.

It is a truth which no one can gainsay, that it is human nature not to remain "affiliated" very long when no benefit of any kind is to be derived from the affiliation. I can see how every individual who attends a meeting of the North American can be greatly benefited, but I confess I do not see where the benefit is to accrue to those who are only "affiliated," and never attend any of the meetings. It seems to me that it ought to be possible to identify the interest of all local societies more closely than they are at present with that of the National. I do not know just how this can be done, but I want to suggest a plan by which I think it could be brought about at our next meeting, in October. I should like very much to see this the largest meeting that was ever held in the interest of apiculture on this continent.

This can be done with very little effort, if we all set about it at once in the right way. I would suggest, first, that every county in the United States, where there is a sufficient number of bee-keepers, organize at once a local society. Let each member pay in a fee of 50 cents, and then proceed to elect a delegate to the North American, and equip him with money enough to pay his expenses, and $1.00 for the annual membership fee. Discuss thoroughly what you would like to have him present to the North American, and send him out instructed to vote every time for the thing that comes the nearest representing what the local society desires. As part pay for the benefit this delegate is to derive personally from attending the North American, he should be required to write up fully the entire trip and the doings of the North American, and present this to the next meeting of the local society. Our Canadian friends should do the same in every Province in Canada. In this way we could secure a very large attendance, and create sufficient enthusiasm to put the North American in a way to be a power in the land. What say you? What County or Province will be the first to respond to this proposition?

I am making local arrangements for a big crowd, and a good time generally. The Commmercial Club, of this city, has come to the front, and tendered me the use of their rooms in which to hold our meetings, and they are doing all they can to help secure reduced rates on the railroads. Just as soon as the matter of rates is settled, it will be published, but I trust no one will wait for this before making up his or her mind to come. The Commercial Club has one of the finest rooms in the city, centrally located, and near to good hotels which have made me liberal rates for our meeting.

We have been promised essays from some of the leading bee-keepers of the world. Mr. Benton is working hard to prepare a good programme—one that will be both entertaining and profitable. Dr. Miller, and a host of others who are a whole convention in themselves, will be here, and the meeting cannot fail to be beneficial to all who may attend. If you have but one colony, come and learn how to care for more.

Friend Stilson has struck the right key in the last *Nebraska Bee-Keeper*. He says: "Let's make up a carload or more and start from Lincoln."

That's the way to talk; come on with your carloads, and this city of the "wild and woolly West" will try to do her part.

I have received a number of letters and cards from those who expect to be here, but still there is room for more. Let them come, and come fast! Every one counts, and helps to swell the swarm of bee-keepers that will be buzzing in the air in our fair city on Oct. 16th, 17th and 18th.

We will furnish the hive, if the people will only "swarm."

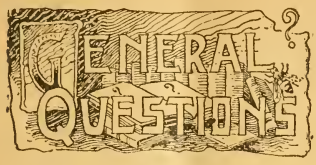
EMERSON T. ABBOTT, *Pres.*

St. Joseph, Mo.

We think Pres. Abbott has given a grand key-note in the foregoing. At the coming convention something of value should be decided upon, so that prospective affiliating associations may have some tangible object to work for in urging such affiliation among their local members. Let there be brought to bear upon this subject the best thought and minds of the bee-fraternity up to and during the convention in October, so that, as Bro. Abbott wisely says, the North American may become "a power in the land." Certainly there is wisdom enough in the ranks of bee-keepers to evolve something that shall bring great profit, and grace and glory, to the honorable pursuit of apiculture.

Profitable Bee-Keeping, by Mrs. Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Leveling Section Combs.

Is there any need of leveling the combs in extracted sections? If so, of what good is it? W. N. C.

ANSWER.—Generally, you will find it an advantage. If you use no separators, you will find some parts of the sections so near touching that the bees will build them together. If you use separators, you will still find there may be such variation that the sections will come too near the separator in places, and then the bees will make bad work.

Another thing: Leveling will take off the edges of the cells that are likely to be dark-colored and perhaps daubed with bee-glue. B. Taylor's "Handy Leveler" is the nicest thing I know of for this purpose.

Young Bees Leaving the Hive, Etc.

1. What is the cause of young bees leaving the hive before old enough to fly? I have a nucleus that the bees act in this manner. I covered it well, to keep them warm, and tried them uncovered, but they leave just the same. They have plenty of honey. They crawl away in the grass never to return.

2. This colony has an Italian queen purchased of a noted queen-breeder; her bees show no more yellow bands than I have colonies that were bought for black. I have 55 colonies; about two of these colonies have bees that show three yellow bands; some hives are ⅔ yellow, and the rest black; some less. Now these bees must all be from the same queen—both three-banded and black. It was just the same last year. The most of them are very vicious. I don't think there is any Italian blood in this section, as I can't hear of any within 8 or 10 years, until I got this queen that I have just spoken of. Can she be pure? C. N. W.

Joy, N. Y., July 25.

ANSWERS.—1. Without being present to see—and then perhaps I couldn't tell any better—I can think of nothing to make young bees act so unless it be that worms have been at work in the cells from which these young bees came, and so they are imperfect.

2. If you bought that queen for a tested Italian, it's all wrong. If you bought it for an untested queen, then it may be all right. From what you say—some of the bees three-banded and some black—the probability is that it is a queen of Italian blood but mated with a black drone. You run your chance of the mating if you bought it as an untested queen. If, however, you bought it as a tested queen, there has been some mistake, and if you write to the man from whom you purchased, no doubt he will make it all right.

Bees Didn't Swarm—Wintering.

I commenced the bee-business this year on a small scale. Last November I bought two colonies of bees—one of them full-blooded Italian and the other hybrids. My bees are in the Langstroth hives. They wintered finely in the open air without any protection except the hive that contained them, and I think it is all that is necessary in this sunny clime.

On June 22nd I took 34 pounds of honey from the hives, and they are now again rich with honey. Surely, this is a fine country for bees, though but very little attention is given to the business.

I read the AMERICAN BEE JOURNAL with interest, and have profited by the information gathered from it. One of my colonies of bees is very strong, but neither has shown any signs of swarming this year; if so, they left without being discovered.

1. What is the cause of their not swarming?

2. Before winter comes is it best to remove all the supers from the hives for the bees to winter, or leave one of them on? M. E. L.

Aberdeen, Miss., July 27.

ANSWERS.—1. Now if you can only keep those bees in the same frame of mind, and offer for sale queens whose

progeny will never offer to swarm, your fortune's made. Without knowing all the particulars, it's impossible to say why your bees don't swarm. I'll tell you some of the things that are generally supposed to help toward keeping bees from swarming: Plenty of room for the queen to lay in; a cool place for the hive to stand; a young queen; keeping the honey closely extracted. Then there's a difference in bees themselves. Some are much inclined to swarm, some little. If the honey harvest is poor, bees are less inclined to swarm.

2. Some are strongly in favor of leaving a super on the hive over winter. The only objection is that sections in it will not stay so white and nice.

How to Introduce Queens.

I have 11 colonies of hybrid bees that I want to Italianize. Will Dr. Miller please give the best plan for introducing queens? W. P.

Choctaw City, Okla. Ter, July 30.

ANSWER.—There are so many ways that I don't believe I know what is the best way, and the easiest answer would be to look at the books. But it may be of a little use to give something from my own experience.

There's only one way that I've tried to any extent that I would feel entirely safe to use if I were introducing an imported queen costing $5 or so. Get several brood-combs containing no unsealed brood, only sealed brood, and a good part of it just hatching out. Put these combs in an empty hive, close it up bee-tight, and put in your queen. Keep it closed about five days, then open the entrance just enough for one or two bees to pass. If the weather is not warm enough to keep the sealed brood from chilling, take the hive into the house, or somewhere where it will keep warm. Sometimes I have set such a hive over a strong colony, having two surfaces of wire-cloth between, so that the heat could rise from below, but no bee could reach its tongue or antennæ from one hive to the other.

But that plan's too much trouble for ordinary use. Here's a plan that's nearly always successful, by which I've introduced a great many queens: The colony must be queenless, and I've oftener waited until it had sealed queen-cells. Then lift out a frame of brood, set the queen on the brood right among the bees without any ceremony, put back the comb and close up the hive. I have an idea that it may be better that the queen is a little hungry at the time. Doolittle says that too often the queen herself is to blame by showing fight to the workers, and when she's had nothing to eat for a quarter of an hour, she hasn't so much fight in her.

If the queen has been reared in a nucleus by yourself, and you want to introduce her to a full colony, just lift out the frame on which you find the queen and put it, bees and all, into the full colony. That's all there is to it.

Some virgin queens were sent me from England by John Hewitt, and I introduced them successfully by following his instructions, which were as follows:

The colony must be hopelessly queenless for at least 48 hours, during that time having no queen-cells nor any unsealed brood or eggs. *In the evening*, after bees have stopped flying, go to the hive, open it as quietly as possible, and drop in the queen. The reason for putting in the queen in the evening is because robbers will not be flying around at that time to make the bees cross and suspicious of every new comer.

In some of the supply dealers' catalogues you will find Miller's introducing-cage offered for sale. It is a simple little cage of wire-cloth and wood, about ¼ inch in thickness so it can be put between the frames of a hive, the queen being fastened in it, and the bees liberate her themselves. There is a passage through which the queen can get out of the cage, the passage being about an inch long, and a quarter of an inch square, and that is entirely filled with Good or Scholz candy. When the bees eat through this candy the queen walks out.

Perhaps it may be well in any of the short methods of introduction to operate in the evening.

Now go ahead, and if you lose a queen in introducing, remember that cases of failure will probably occur with almost any plan that may be used except the first one that I gave. The chances are better if honey is coming in freely.

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

Our Doctor's Hints.

By F. L. PEIRO, M. D.

McVicker's Building, Chicago, Ill.

Nervous and Sick Headache.

Dear Miss Godfrey, Chicago:—Your wish to know the causes and cure of nervous and sick headache shall be complied with at once, because I can imagine your anxiety for relief if you are a sufferer from either form of this discouraging affliction.

The *cause* of these maladies has puzzled the medical minds for ages, and I am not certain that we of to-day are much nearer the facts than were our medicinal ancestors. It is a queer admission for a modern M. D. to make, but "facts are stubborn things." Of course, much guessing has been attempted. One says the liver is at fault; the other, that the stomach is the guilty organ; and latterly the profession seems pretty uniformly settled in the conviction that our truant *nerves* are entirely to blame. But if not certain of the actual *cause*, there is no doubt that we have learned the existence of various predisposing factors, which if obviated will reward the sufferer by comparative peace.

Some persons are especially *predisposed* to these ailments; others, like myself, have never a twinge. It is not that we are wiser or more considerate of ourselves, but simply because we are not "built that way"—so to speak. Diet that will nourish one, may prove a very poison for the other—hence, the necessity of *studying* the kinds of food best suited to each particular individual, and, of course, avoiding that which we have reason to fear.

Constipation is only an indication that the food we eat is not exactly suited to our active requirements, hence it is another "straw" pointing to the sick headache. Sedentary habits is another chief cause, but that can easily be overcome by calisthenic and other exercises at home, and where better than in a big bathtub with plenty of water and long brush! O the *scrubbing!* What work it entails, and what wonders it performs! The namby-pamby sponge or wash-cloth is nowhere in comparison!

But to be brief: The less fats or oily substances the better, because illy assimilated. Much seasoning of food, especially with pepper, spices, and mustard, is deprecated—they simply corrode the membrane of the digestive track, and much retard normal functions. Pies, cakes, candies, and confections generally are harmful for practically the same reasons; hence, should be shunned. Meats are not best, though occasional indulgence is not interdicted. Fresh fish, vegetables, fruits, eggs, bread, milk—preferably buttermilk or "clabber"—lemonade, shrubs and ices, give wide range for excellent diet. Coffee, tea, and fermented drinks are to be avoided, but you may literally deluge yourself with *water*—good, fresh water, hot or cold—you need fear no ill results. The system is flushed thereby, and the impurities of the various excretory organs (the liver, spleen, and intestinal canal) are carried out of the body, and our physiological machinery kept in good working order. Tight-lacing is a fruitful source of headaches—but of course *you* are not so addicted.

As to remedies, little need be said. *Prevention* must be our sheet-anchor. I fully trust to your intelligent conception the importance and the duty of this suggestion. During an attack of sick or nervous headache (they are one and the same thing), five or six drops of hydrochloric acid in a glassful of hot water is helpful; or a teaspoonful of Horsford's acid phosphate in water is often effective. Repeat if necessary.

If with this treatment perfect quiet in a dark room can be had, so much the better. But *remember*—to study your *needs* in eating and drinking, not less in your mode of dressing, and especially see that the shoes are water-proof, and two sizes too big!

Chills and Ague.

Chills, eh? Well, that is disagreeable enough! Happily not immediately dangerous.

Intermittent fever (as termed by the doctors) may result from various causes, but chiefly from living in malarial districts where much vegetation decays, as near rivers, ponds, or during wet seasons, or to a debilitated state of the system that nearly all external influences will impress. To *continue* to live in such unhealthy localities is, of course, a certain assurance of return of the "chills" with more or less frequency.

Such residents must simply make up their minds to suffer from this form of

fever and ague indefinitely. It seems a gloomy outlook to constantly expect this unwelcome cold visitor, and to reflect that its visits can only be discouraged by constant medication. Reason would dictate a removal from such surroundings, but I know full well this desirable change is not always possible. As those malarial districts are usually the most fertile, farmers prefer to remain where their labors are most profitably rewarded, even at the expense of frequent "shaking" and dosing quinine. But for the occasional sufferers—those who have accidentally contracted the "chills"—as it were—and are not "old timers" in its service, very safe and practical suggestion is here given.

We'll suppose your chill is due at 10 o'clock to-morrow morning. Go gather a big handful of boneset from that low, swampy field, and after washing it clean put it on the fire with two quarts of water. Let it boil one hour and simmer two more, then strain clean, and every two hours take a half cupful in a pint of hot water. Keep this up *faithfully* all day, when not asleep at night. Less of the "tea" or water will do little good.

This remedy *may* make you throw up—all right if it does; if not, quite likely it will act on your liver and bowels—the more thoroughly the better.

In the morning, bright and early, several hours before you expect the chill, have a big pint of very strong coffee made, to which you add the juice of a good, large lemon. Make two doses of this mixture, one each hour, drink hot.

It will be an exceedingly presumptuous "chill" that will have the hardihood to return after such a reception! But supposing it should, and fever follows, drink all the lemonade you can, and the following day commence the boneset tea again, and follow with the coffee and lemon, as before, and a hundred chances to one you will have permanently parted with your persistent enemy. That's the way I "shook" him 30 years ago, and we've never met since!

Children predisposed to chills, owing to locality, can with great benefit be given, say a fourth of this coffee dose once in a while with vastly better result, and greater safety, than the resort to the indiscriminate use of quinine, blue pills and Dover, as usual.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Bees Booming—Bee-Trees.

We have plenty of rain now, and bees are booming. We cut six bee-trees last week—almost all good Italian bees.

August 6. JENNIE ATCHLEY.

PROFITABLE BEE-KEEPING.

Lesson No. 8.

(Continued from page 142.)

HOW TO CURE FOUL BROOD.

Now, I have headed this short lesson "How to Cure Foul Brood," but I must confess that I do not know for sure whether my method will cure every time or not, but I lost 100 colonies down to four before I checked it, in the year 1880, and I have not had any in my apiary since 1883.

I may be away behind the times with my cure, but I hope to assist some one. I do not claim the cure my own invention, either—I belive it was at the suggestion of A. I. Root that I tried the plan, and it has been given lots of times, and it will not hurt to give it again.

I shook the bees all out of their hives into clean empty boxes or hives, and kept them shut up until they began to show signs of starvation, which was usually 36 hours. Then I put them into another clean hive on comb foundation, and on the second brood that was reared in these new combs, I found a few cells of foul brood. I just treated the whole outfit as before, and this time it was getting too late for them to gather a winter supply, and I fed them up on honey and sugar syrup, and the next spring I watched closely for the disease to reappear, but it never did appear, and I caught an idea then that if one could possibly wait until breeding time was just about over, and starve the bees,

and put them on frames of honey or syrup (plenty for winter) that by spring the germs that the bees might carry with them in some way would disappear, and not bother the bees any more.

The trouble with this would be, if the disease should appear in the spring-time we could not afford to wait until fall, so we would have to go through the operations twice to get a cure. Or I think it will take twice in most cases.

I would advise that all old hives that had contained foul-broody bees, should be scraped clean and scalded out thoroughly before using again, and the sooner the hives are cleaned, the better, as bees will gather up the bee-glue and bits of comb if left where they can get to them, as there is always more or less comb and glue left sticking to the old hives, especially if bees have been in the hives for some time.

The reason I advise so strongly that the hives be well scalded is this: I bought a hive one time for a pattern, and carried it home 15 miles; I cleaned it well, but did not scald it, and the hive I bought had contained a foul-broody colony before I got it, but I did not know it; in fact, foul brood had killed the bees outright, was why the hive was empty. The colony I put into this hive took the foul brood, and from it I lost nearly 100 strong and prosperous colonies. This is why I am afraid to use a hive without scalding, that has had a foul-broody colony, and I believe I have a right to be afraid of hives that have been exposed to foul brood, don't you think so?

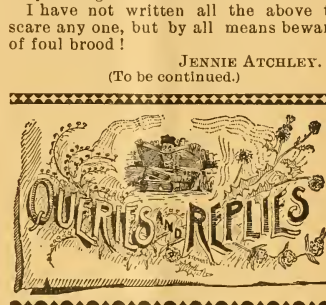
I think the above is about the extent of my cure, and if my bees should ever become affected again, as they were then, I should burn lock, stock, and barrel, and begin anew with healthy bees, if I could get new bees reasonable.

It is useless, I suppose, to state that I tried salicylic acid, and all known remedies at that time, and the disease spread right on just the same. I extracted some honey from some of the colonies, and put it into a jar, and to touch the jar, the honey and foul brood matter would shake like jelly, and the hives were continually covered outside with green flies, and the apiary could be smelled nearly a half mile on the windward side. This is the kind of *foul* brood my bees had, and no mild remedies would check it. What I know of the foul brood of to-day, it is nothing to compare with what my bees had. This is why I have so bitterly opposed the use of hives without being well scalded. Some say it is no use to scald the hives, but I think if they experience the trials and the kind of foul brood my bees had, they will agree with me.

I have not written all the above to scare any one, but by all means beware of foul brood!

JENNIE ATCHLEY.

(To be continued.)



Dummies or Filled Combs for Most Honey

Query 936—My hives are 10-frame, and I want to reduce the room of the queen to 8 frames. I can take out of each hive two empty combs and replace them with dummies or with two combs filled solid with honey. Saying nothing about the expense, which will help me to get the biggest crop of comb honey—the dummies or the filled combs?—Illinois.

I give it up.—JAS. A. STONE.

Filled combs.—J. H. LARRABEE.

I should use the dummies.—G. M. DOOLITTLE.

I'd rather have the combs of honey.—C. C. MILLER.

The dummies, as bees will guard the comb.—MRS. L. HARRISON.

I do not know, but think I would prefer the dummies.—EMERSON T. ABBOTT.

I should take, in place of the dummies, the frames of *solid honey*.—J. P. H. BROWN.

The dummies, if your honey seasons are like those in central Michigan.—R. L. TAYLOR.

The filled combs, if your bees are likely to need honey before the crop.—DADANT & SON.

I do not think it would be very different. I should prefer the honey, if to be had.—A. J. COOK.

I think if there is any difference, it would be in favor of the filled combs.—MRS. J. N. HEATER.

The filled combs would be my choice. You do not state the *kind* or *size* of your frames, but if they be the standard

Langstroth –ten frames are nearer right than eight, according to my views. —W. M. BARNUM.

I don't know. I would answer the question by trying the experiment, if I wanted to know.—EUGENE SECOR.

I think there would be little difference, the advantage, if any, being with the combs of honey.—J. A. GREEN.

Use the filled combs, every time. I never yet saw the populous colony that was supplied with too much honey.—C. H. DIBBERN.

I would prefer the dummies, as it will take bees to cover and look after the honey, and not so with the dummies.—MRS. JENNIE ATCHLEY.

The dummies, unless they carry some of the two combs above. The reason would be that the dummies would release the bees necessary to warm and guard two frames of honey.—S. I. FREEBORN.

The question is wholly theoretical; the only way to determine it, in my judgment, will be to make a trial test, but even then the fact that seasons vary so much in the honey yield, that a test would be very uncertain. I should incline to the dummy, though.—J. E. POND.

I cannot see how there could be any difference. If there is honey to be gathered, and there are bees to gather it, and there is room to store it, it will be gathered and stored; and bees can store no more honey in combs that are *full* than they can in a pine board.—M. MAHIN.

If you put the two frames of honey into the brood-nest, the bees will very likely move the honey into the sections —at least a part of it. Combs of honey are better than dummies. If you can take two empty combs out of each hive, your queen is not doing her duty. Get a better strain of bees. Try the Carniolans.—E. FRANCE.

The filled combs, every time. But if in your locality you have an early honey-flow, and a *fall* honey-*flow*, and honey enough can be secured by the bees between the two harvests to keep the colnies in good condition, you may save the expense of the two "filled" combs, and use division-boards in their place. But how many bee-keepers have just such a location for their apiaries? Please answer, one at a time.—G. W. DEMAREE.

Have You Read the wonderful Premium offers on page 131?

Handling Queen-Cells Nearly Hatching.

Written for the American Bee Journal

BY G. M. DOOLITTLE.

A correspondent writes to know "if it will answer to shake the bees off the frames of brood having queen-cells on, if it is wished to save the cells for use." As I have many similar questions put to me, I will answer this through the columns of the AMERICAN BEE JOURNAL.

It is never best to shake a frame having queen-cells upon it at any time, and especially at or near the time of the queens becoming mature. Very many have been the number of queens killed or injured so as to make them valueless by this plan of getting the bees off the cells.

If the cells are just capped over, such shaking dislodges the royal larva from the royal jelly, throwing the larva to the bottom with such force that it is either killed outright, or, in failing to get back, dies where it is. If further advanced, such shaking deforms the queen by her having crippled wings or legs, or, what is quite often the case, the queen has a dent in the abdomen, certain segments of which are dented inward, or the whole flattened or curved. While this last is not as bad as to have the wings deformed, yet it is a very rare case where a queen with a deformed abdomen proves to be a really good queen. Such queens generally become fertile, and lay quite well for a time; so are of some value; but those whose wings are crippled are worse than no queens at all, for they can never become fertile, while they stand in the way of our successfully introducing a laying queen. In case such crippled-winged queens are of the German or hybrid race, they are very hard to find, and the parties who have ordered queens for supposed queenless colonies having such crippled queens, and lost them in trying to introduce them, can be numbered by the score, if not by the hundred.

No one should attempt to introduce a queen to any colony, unless they take away the reigning queen at the time they put in the new one, without first trying the colony with unsealed brood to see if they are really queenless. If they build queen-cells on this brood, they can know that they have no queen; if not, then they may know that if they tried to introduce a queen to that colony without first finding and taking out that which the bees are reverencing as a queen, they will be certain of losing the one they would have preside over the colony.

How shall we get the bees off the queen-cells if we cannot shake the comb to dislodge them? The way I manage is as follows:

If the day is warm, and robbers are not bothersome, I take the frame from the hive and set it near the entrance to the hive, the same side up as it was when in the hive. By the side of the frame I set a basket or pail having two or three thicknesses of soft cloth in the bottom of it, when the bees are driven from the cells by directing a stream of smoke on the individual cell I wish to take first. As soon as the bees have run off this cell, it is cut off and carefully laid on the cloth in the basket. Smoke is directed to the next cell, when this is treated as the first, and so on until all are off. The bees are now shaken from the comb, if the comb is to be used in some other hive than the one from which it came, but otherwise, the comb, bees and all are set back in the hive. The basket of cells are now carried where we wish, with no injury to the cells in the least. If too cool for this way of working, or robbers annoy, then proceed like this:

After taking the frame from the hive, and setting it down in front of the entrance to the hive right side up, blow smoke on the bees which are on the comb, in such volumes that it will cause them to fill themselves with honey, and while they are doing so, close the hive. When the hive is closed, smoke is again poured upon them to such an extent that the most of the bees will run into the hive, when the remainder are brushed off with a large quill taken from a turkey's wing, the same having the feather on the wide part of it trimmed down half way, so that it will take the bees off easily without irritating them, as is the case where the untrimmed quill s used; for then the bees will get in the same and sing and sting until a general uproar is often caused.

If the bees are loth to leave the comb, and run into the hive from smoking, the whole of them can be brushed off, but be sure they have filled themselves with honey before you undertake to brush off so many bees, unless you are willing to stand many stings, for the bees around queen-cells will fight with a vengeance equal to a tiger's when being robbed of her cubs, unless the precaution is taken to coax them to fill themselves with honey.

If the weather is cool, and the cells are to be placed at once in different hives, it is a good plan to take the bees along with the cells, so as to keep them warm, when, with a little smoke, drive the bees off the cell you wish, so that they will be out of the way while you take it off the comb.

After the cells are all off, then the bees can be shaken off the comb at the entrance of the hive, the same as from any other frame.

This latter way of not trying to get the bees off until after the cells are removed, is good at any time where the cells are to be placed in different hives about the apiary at once, but where you use a queen-nursery, or for any reason wish to keep the whole away from the bees for an indefinite period of time, then the bees must be gotten off the comb.

I have written this out at length so that even a novice could understand, as the secret of honey-production lies very largely in good queens; while it is very easy to spoil the good qualities of queens by an injudicious handling of the cells in taking them away from the bees.

Borodino, N. Y.

A Few Notes and Comments.

Written for the American Bee Journal

BY DR. C. C. MILLER.

Speaking of Rev. Anderson with his 35 colonies (page 135) reminds me that in Germany the ranks of bee-keepers are largely filled by the clergy. Teachers, however, abound. In a list of 89 German bee-keepers before me, 13 are teachers.

TRANSLATING ITALIAN.

So Dr. Peiro translates Italian (page 135). Good. Good queens come from Italy, and some good ideas. It always aggravates me to be able to make out just enough of Italian to know there's something in *L'Apicoltore* I think I'd like to read, and can't. That paper

seems to keep close track of what's going on in this country. I know no other paper that quotes so much from the query box of the AMERICAN BEE JOURNAL.

SEDITIOUS PREACHING!

Dr. Peiro is a good-hearted sort of a man, but he isn't smart a bit. The idea of getting people into the notion of trying to keep well so they'll have less use for a doctor! And to use their commonsense! Why, Doctor, it's seditious to preach such doctrine. Let such notions get abroad, and it will be the ruin of many a flourishing firm that are just coining money selling patent medicines.

A BEE'S "DISPOSITION."

I have some doubts as to the correctness of that Crawford county bee-keeper's theory on page 141. Did you ever know a loaded worker on its way to a hive to become enraged? When a bee is at work on the flowers, you may strike it or do what you please, and it never offers to touch you unless you pinch it. Doesn't it carry that same disposition with it until it enters the hive?

SOWING SEEDS FOR HONEY-PLANTS.

Isn't it well to be a little careful how we raise the expectations of beginners? If one of them should start out with the idea given on page 144, that he can keep 500 colonies in one apiary if he rightly uses 30 cents worth of seeds, he'll likely be a very disappointed person. I don't believe there's a spot in all Illinois where 500 colonies can be profitably kept in one apiary, no matter how much seed.

Marengo, Ill.

The Midwinter Fair Apiarian Exhibit.

Written for the American Bee Journal

BY W. A. PRYAL.

As the International exhibition at San Francisco is now over, it seems almost useless to say anything about it or the exhibits that were displayed there. Still, as I had something to say about the honey exhibit (page 789 of last volume) that called forth a reply from the gentleman who was supposed to be responsible for the non-success of the honey-show, I think it no more than justice to him that I should give his side of the affairs. It will be observed that what he states bears me out in what I had to say in regard to his connection with the matter. I then stated, as nearly as I can recall without having the words before me, that as I knew the young gentleman (the correspondent I am about to quote) to be an energetic and capable person, the fault of not getting up a creditable exhibit could not be due to him. Here is what he had to say, on June 25th:

With regard to the space, I had only two places to choose between—the one where the honey is, and the other a very dark place on the first floor where it would hardly be possible to distinguish one grade of honey from another. Honey granulates quickly in San Francisco, and I thought the heat would have a tendency to prevent granulation.

There were two reasons why I did not get a better exhibit, but you did not guess either one of them. I do not know a single bee-keeper that refused to send honey to be exhibited, if he had any, but nearly every bee-keeper in Ventura county had sold his honey, or did not have any suitable to exhibit. The other reason was that the manager of the Ventura county exhibit sold about half of the honey exhibits shipped to him, without placing them on exhibition.

Mr. Mercer, Mr. Mendleson, Mr. Archer, and myself, went to San Francisco and placed our own exhibits, and if we had not done so the honey exhibit would have been a worse failure than the California exhibit at Chicago.

My "pass" did not cost the Fair managers a cent, and was only good for one month, and after paying about $20 out of my own pocket in traveling expenses, and not finding much honey outside of this county, I gave it up.

That settles it. All hail to the Ventura quartette who did so much to give California a fair exhibit of honey at the late Midwinter Fair at San Francisco! As all the four gentlemen received high awards for their exhibits, I trust they feel repaid for their trouble. I have not heard whether they had to pay for the space they occupied at the Fair or not. It seems to me that an arrangement should have been made by the State Bee-Keepers' Association to have secured sufficient space, and then tried to have filled it with suitable honey. But there is no use "crying over spilled milk," so we can afford to let the matter rest where it is.

We have the consolation that no other State beat us at this Fair, though Nevada brought forth some of its prize gilt-edge honey, in the hope of knocking us out.

North Temescal, Calif.

Great Premium on page 196!

Bee-Escape Honey-Board and Swarming.

Written for the American Bee Journal

BY W. C. LYMAN.

On page 83 Mr. Demaree tells how he has prevented swarming by raising the sealed brood above the excluder; and on page 80, Mr. T. I. Dugdale tells how he prevents increase by placing the old brood-chamber on top of the hive in which he puts the new swarm. Both of these plans are excellent, but have not given me full satisfaction, because drone-brood hatching above an excluder, dies there, unless the hive is opened often enough to let them out. Drones above an excluder in the sections are a nuisance.

In Mr. Dugdale's plan the brood which hatches from the old brood-chamber becomes really a new colony, with a new entrance to its hive, although it is in a position to be easily united with the swarm below. To obviate both of these difficulties, and to keep all of the bees at work in the one hive, it occurred to me that I might use a modification of the bee-escape and the queen-excluding honey-board, in such a way as to let the drones out of the front of the hive, above the main entrance, while the workers would be allowed to go directly down into the boxes, or extracting super, and thence to the brood-chamber below.

To accomplish this, I made a honey-board of ⅜-inch lumber, having the usual rim around it, so as to give a ⅜-inch bee-space on the upper side; but I made it of only three strips of wood—one wide, one on each side, and a narrow one (two inches wide) in the center, with two of the perforated-zinc strips between. This was intended to cut off, to a certain extent, communication between any super or brood-chamber, which might be placed above this honey-board, and the rest of the hive; and to discourage the storing of honey above it.

For a bee-escape to use in this honey-board, I took a Hastings escape and cut off the projecting ends of the perforated tin, and then cut the escape entirely in two on each side of the entrance hole on the upper side, and also removed the half circle of tin from the exit ends of the escape, to give the springs more room to play. This gave me two escapes from each one of the Hastings', through which the bees could pass horizontally, instead of entering the escape from above.

The Lyman Bee-Escape Honey-Board.

I now placed one of these escapes in the center of one end of the honey-board by cutting away the rim enough to let the exit end of the escape come out flush with the outer surface; and after putting a small piece of wood (⅜-inch square, and as long as the escape) under the perforated tin on each side of the escape, I fastened both by nailing down through.

The bees could now pass directly through the escape to the outside of the

hive when the honey-board was in place; and the workers could also pass down through the two strips of perforated zinc.

For mode of using: When a swarm issues, remove the old hive from its stand, and put in its place a new brood-chamber, on which put the comb or extracted-honey supers from the old hive. Let the old brood-chamber remain beside the swarm until they have begun work in their new quarters, then remove the cover of the new hive, and put in its place one of the bee-escape honey-boards, on which put the old brood-chamber, and cover up, with a shade-board on top of all.

The bees are now all in one hive, where they will go on with the work with renewed vigor, and in only one case have I had an after-swarm, although the young queens were left to hatch out at will.

It is very easy to make sure of no after-swarm, as there is nothing but the cover to remove to get at the frames containing queen-cells, to cut them out.

There are other uses to which this style of honey-board can be put, which would take too much time and space to describe now; but my use of it the past season has been very satisfactory in several ways, though of course I know that a single season's test is not enough to determine its value.

Downer's Grove, Ill.

The Best Honeys of the World.

Bro. Chas. F. Muth, of Cincinnati, O., was recently asked for his opinion of sourwood honey, which he gave in *Gleanings*. He also gives his opinion of other honeys as well, that will be of interest to all, as Mr. Muth is perhaps better posted on honeys than any other person in this country, if not in the world. Here is what he says:

Sourwood furnishes a very good honey of light color and good flavor. I should put it in the same class with basswood of the North and Northwest, or the orange-blossom or saw-palmetto of the South. We have just now a new arrival of orange-blossom honey. It is of good quality and fine taste, and we advertise it as something "new and choice;" but we shall be no more able to raise a customer for it now than we were at former trials. A certain preference would be given to basswood or sourwood honey, because of the former having a lighter color. All the above will be sold to manufacturers, principally, almost exclusively.

The most popular and most praiseworthy honeys are: Northern white clover; mangrove of Florida, and sage of California, in their purity—*i. e.*, without an admixture of other qualities. According to my experience, this trio includes the only qualities accepted by the public for table use. Almost all other qualities go to the manufacturers, principally.

It must be remembered that our tastes are cultivated. While basswood honey is of fine quality, and, no doubt, popular in the basswood region, still it will never be successfully introduced in a clover country, for table use. I have tested the matter for many years.

Horsemint honey, very obnoxious to our taste at first, loses its bad flavor gradually by our handling and tasting it. When my friend, Dr. Lay, said, "Horsemint is the honey for a man of Texas," and when I replied that it amounts to nothing in business (what he and I should like), both of us were correct. Only those qualities which are popular, or can be made so, count. All qualities next to the above-mentioned trio, in regard to flavor and color, go to manufacturers.

The idea I intend to convey is, that, according to my experience in the business, white clover honey stands at the head of the list; next comes mangrove of Florida; next, sage of California; and next, any amount of other varieties too numerous to mention, all of which can be sold to manufacturers only, because of their lower prices. However, anything is possible these times, the business features of which are abnormal and unnatural. Since we sold at 6, and even 5½ cents per pound, by the carload, each of first-class California and of clover and basswood extracted honey, we can hardly find customers for dark honey at any price. The bottom has come out of prices of all articles of late, which, I hope, is temporary only.

Cincinnati, O., May 7, 1894.

In commenting upon what Bro. Muth says in the foregoing, Bro. Root adds the following paragraph:

What Mr. Muth has said in regard to the taste of individuals in different localities is quite true; and along with this idea it may be well to say that, in certain parts of New York State, a consid-

erable number consider buckwheat the finest honey in the world. They like that rich, strong flavor and dark color. To them, no honey can stand in comparison with it; and in regions where basswood seems to be the chief source of supply, no honey is considered equal to it. It is well that there is this variety of taste; because if everybody universally agreed that one kind of honey was the best, honey from all other sources would necessarily bring a lower price; but as it is, there are quite a number of "best honeys" in the world.

Closed-End Frames Once More.

Written for the American Bee Journal

BY F. L. THOMPSON.

Mr. Demaree has written, and probably will write, so much that is good and sound, that he can do more good with a wave of the hand—and more harm with a Podsnappian gesture—than an ordinary man in a knock-down fight.

On page 83 he has waved aside close-fitting frames with the magical words "self-interest" and "the worst of misconceptions." Most users of close-fitting frames, myself among them, have no interest in their sale. The manufacturers, therefore, are aimed at. They may fight their own battles. But how about such men as W. Z. Hutchinson, R. L. Taylor, P. H. Elwood, and many others? "Self-interest" and "misconception" are shots wide of the mark. Such men are at least as good authorities on hives as the manufacturers, or as Mr. Demaree, as he himself no doubt would cheerfully acknowledge; then why throw dust in the eyes of beginners by implying that there is only one side of the question? I could mention three of my neighbors, practical and experienced apiarists, who prefer closed-end frames after experience with the others. Considerations of locality (such as the amount of propolis gathered), of management, and especially of the kind of frames with which one has already become familiar by long handling, *may* go farther than any intrinsic merits or defects of the frames themselves, toward biasing one's opinion.

The instance given is misleading. A beginner might say, on reading it, "What! ant-nests in hives!! That settles it. No close-fitting frames for me." But if I should find an ant-nest in such a place, my faith in close-fitting frames would be unimpaired. Why? Because, having never yet found or heard of such a case, except this one, or any condition of things which could be described as otherwise than "clean and sweet" behind closed-end frames, I would know that such an occurrence in this locality, and presumably most other localities, is exceedingly rare, and, consequently, cannot seriously be taken into consideration. By the way, closed-end frames have been found more effectual against the moth than the others. On page 791 of Vol. XXXI, Mr. Mark D. Judkins, of Osakis, Minn., gave some pretty decisive testimony to this effect.

Mr. Demaree says the frames were so "stuck up" that he had to pry them apart to get them out. As I have before explained, we expect some prying to be done at certain seasons of the year with closed-end frames. It is a disadvantage, but many have decided that it does not outweigh the advantages to be derived from their use. If the prying in this case was no more than is ordinarily needed, it requires no comment. But if they were stuck together so as to need an instrument like a young crowbar to get them apart, as Mr. Demaree seems to imply, one of two things was probably true—either that locality supplies an unusual amount of propolis, much more than the average locality, or the interior surface formed by the end-bars was rendered very uneven by some frames inclining one way and some another, affording opportunity to the bees to deposit much more than a "slender line" of propolis along their junctures, as is usually the case.

If any prying at all is objected to, yellow vaseline may be applied with a brush to the edges of the end-bars before the frames are put in. This, and tallow, have frequently been recommended and found good, and ought to be well known by this time.

I find that I omitted the greatest advantage of closed-end frames. The "bee-space all around" of the common hanging frames, or of any frame not closed more than half way down, is contrary to nature. Combs are naturally joined by their ends, as well as by their tops, to the receptacles in which they are. This makes the space between every two combs like a high, narrow little room—a miniature hive, in fact—quite independent of the other spaces, or of the spaces between the last combs and the sides of the receptacle. Add to this that honey is a good non-conductor of heat, and do you see the point? Division-boards are unnecessary. A solid

comb of honey in a closed-end frame serves all the purposes of one. With a little attention in the fall, you have double-walled hives for winter. The closed-ends furnish the inner wall at the hive ends, and the solid honey-combs on each side, with a top covering for at least the side frames, furnish the inner wall at the sides, and the best of it is, that it is mostly automatic.

I think I have already said enough, and hope others will tell from their own experience of the merits and defects of these frames. Let us permit no little flings at articles of approved worth, in the bee-papers, without demanding the proof.

Arvada, Colo.

Honey as a Food and Medicine.

Read at the Indiana State Convention

BY DR. J. M. HICKS.

It is a known fact to many of us, that pure honey used in many ways as a medicine has but few if any equals in therapeutics. Honey has been used for many hundreds and thousands of years as a medicine in the various diseases of the human family, such, for instance, as a severe cold, croup in children, coughs, and all bronchial affections. We find honey to be one of the great medicinal factors, not only in the above-enumerated diseases, but it has great healing properties in all pulmonary affections.

We read in Holy Writ, as well as in ancient history, that honey was prominently used as a medicine by the ancients in many of their ills. It is said that the Mahomet bible taught the Egyptians that honey was a medicine for man; also that Mahomet, in his Koran, prescribed honey as a medicine. One of the chapters of that work is entitled "The Bee;" (see "British Bees," by Shuchard, pages 90 and 91).

Honey is not only a good medicine for many distempers that the human family is heir to, but we also find it a healthful as well as cheap food for children; especially that which the bees gather from the various mints, such as the horehound, catnip, peppermint and horsemint; and I would not forget to mention especially the honey that is procured from the various clovers, such as the Alsike, red and white clover—these furnish the best of honey for all medicinal purposes.

Let me here state as a matter of fact, I have had on several occasions to test the merits of honey in severe cases of colds, and have as yet not been disappointed, but all my patients have been greatly benefited in a very short time, and the relief was permanent in each case. I am sure that if we can at all times procure a pure article of honey from the sources above enumerated, we can at all times depend upon it as a sure remedy or medicine in colds and bad coughs.

And especially do I know that honey, if properly and judiciously used as a medicine, in pulmonary or lung troubles will be of great and lasting benefit to the patient. But like many other therapeutic agents, it needs other combinations, in order to make it more efficient in meeting special cases with which we have to deal. I am not inclined to extol any article for more than it is truly worth, but I do think, and believe, that to a large class of the American people the true value of honey as a medicine in many of our ills, is not known as well as it should be with the masses.

Before I close, let me impress it upon the minds of this organization of bee-keepers, that it is the duty of each and every member of this and other State organizations, to see well to it that all honey offered in the various markets should be a pure article, and not adulterated, as is often the case; then, and not until this can be done, can we depend upon it as a true medicine in many of the ills we have to contend with.

Indianapolis, Ind.

Some Honey-Producing Trees.

Written for the American Bee Journal

BY W. H. MORSE.

Trees that bees gather honey or pollen from we all as bee-keepers should endeavor, when opportunity occurs, to plant, or when public improvements are in operation, we should endeavor to get in our work; in fact, if we were to watch every opportunity, the bee-keeper would become a philanthropist, unconsciously to himself.

The next thing is to get the right varieties, and recommend nothing except what is suitable to fill the bill.

Before I go any further, I will say that I am not in the business of selling, as I have nothing to sell, but wish to give my little knowledge, and if I convey but one item to the general knowledge, I am repaid a hundred fold.

Of course different States, and even

parts of States, are much more congenial to the growth of particular varieties, so each must study and judge for himself.

The first tree I would plant if I wanted a shade tree would be a young basswood —*Tilia Americana*. Of all trees that I know, this tree seems to be particularly well formed to withstand wind and storms. Look at the limbs and see how they start from the main trunk, and you will see that it will rarely split from storms; and the value of the tree as a honey-producer is grand.

THE WILD OLIVE.

Next to the basswood I hold the wild olive—erroneously called Russian olive. Its botanical name is *Elæagnus Argentia*. This tree is mentioned in the "Dictionary of Gardening and Encyclopedia Horticulture," as growing 12 feet high, but I have a tree in my charge that has made half that growth this year. It has been planted five years, and bids fair to grow to be 40 feet in the next 10 years. The flowers are produced at the base of the leaf stalk, two and three in a cluster, and open in succession, very much resembling the individual flowers of the "lily of the valley," and about the same size, the inside being yellow, and the outside being covered with silvery scales, as are the leaves, which give it a beautiful appearance. It lasted in the flower two weeks, and I never saw the tree without bees on it when in flower. Taking all points, it is a beauty in Nebraska.

THE MAPLES AND BOX-ELDER.

Then the maples, especially *Acer Saccharinum*, and the soft maples—they are worthy of extended planting. My bees had only one day on them, but that day was a sight. I thought I was going to get 20 pounds to the hive from maple alone, but, alas! 12° of frost, and all was over. Box-elder flowered out, then they were busy again. The box-elder and the maples make a quick growth, which is a great thing in the West, in their favor.

CATALPA AND HONEY-LOCUST.

The *Catalpa Speciosa* is a fine tree, and has the advantage of flowering when young. I have had them flower the third year from seed, but the trees get badly used up in storms; but visit them early in the morning, and see the bees in the flower secure from dew and light skowers, which makes up for a deficiency.

Then there is the honey-locust—*Robinia Pseudacacia*—a grand tree with such a rapid growth. It would pay here in the West to plant it for firewood alone. The tree flowers when four years old from the seed, and as its name implies, it is a good honey-producer.

Now let's hear from others on this subject, as I am convinced it is of vital importance to the apiarist.

Florence, Nebr.

The Busy Bees.

Written for the American Bee Journal

BY R. S. FOSTER.

How great, O God, how wonderful,
This world of wealth, of thine,
How faultless and how marvelous
Thy workmanship divine!
The ocean with its depths immense,
The continents that bound—
Its towering billows, and divide—
The currents circling round;
The verdant and the fruitful isles
That stud its surface o'er,
Are thine, and given for awhile
To bless the rich and poor.

Behold the swift, sweet laden bee.
So provident, though small,
A unit small 'midst those that fly,
Whose fruits are chief of all;
With skill unerring they traverse
The prairie and the wood,
And snatch the incense of the flowers
To feed their hungry brood.
Come skeptics all and gaze upon
Their plans as wise as thine,
How they uprear, contrive, and build—
Did not the Lord, divine,
Impress upon their kind and race,
Their architectural skill—
Their matchless thrift, and crowning all
Their persevering will?

How regal like their sovereign is,
How proved her form, and mein—
A sovereign of an ancient line,
And always, too, a queen.
Where'er she goes, they follow her—
An army, loyal, armed
With daggers sharp, and poisoned tipped;
Their sentinels alarmed,
Challenge, advance, wheel round, and then,
Charge fearlessly the foe—
A hundred, or a thousand men,
Of paces fast or slow.

And in this sublime science, Lord,
We see a Father's hand,
That outstretched feeds the busy bee,
A fainting, famished land.
His works are mighty, and are planned,
To lead His children on
To higher planes, and share at last
The pleasures of His Son.

Read our great offers on page 223.

Don't Get Angry, Bee-Keepers.

Written for the American Bee Journal

BY JOHN F. GATES.

When I read Bro. Clarke's reply to Dr. Miller (on page 694, May 31st BEE JOURNAL), I said to myself, "Isn't it too bad that as good a man as Bro. Clarke is in every other respect, should spoil his influence by getting angry so much?"

Now what is it that makes us all like Bro. Miller? It is not his money, nor his knowledge, nor his beauty—though he may possess all these, yet the reason we like him is because he smiles—not a sickish, sloppy, soft, sozzling sort of a smile—ah, no! he smiles with his soul, or his soul reflects its geniality on his face. Excuse me Bro. Miller, but if we would appreciate men more while they were living, the world would be better for it. Yes, when I read Clarke's words to Miller, my involuntary action was to draw a long breath, and feel sorry, and lay the BEE JOURNAL down. When I read Miller's reply, I slapped my leg till it hurt, and, says I, "Wife, what this world needs is more Dr. Millers!"

It may be said that one can't make himself pleasant on demand. *Yes, you can.* I don't wish to talk about myself, but as I am best acquainted with my own case, it will be all right.

When I was a boy, I found myself with a quick temper and impulsive ways. At school I would not take even a little bit of "sass" from any boy, no matter how big he was; but I found this course did not gain friends. I wanted friends, but I had a vague idea that I could maul my enemies until they would be friends. But it didn't work well. When I became older, I saw that those who were kind, had the most friends; and as I desired to have friends, I made a resolve to *never allow my angry passions to rise again.* Well, I made that resolve to keep, and, friends, I think it has kept me out of lots of trouble.

I've seen many dangers and hardships since then, both in war and in peace, on land and on water, but I smiled at all. When the enemy tried to comb my hair with bullets, I smiled. When a man tells me he is going to smash me on the nose, or "do me up" in a lawsuit, I smile, and tell him I should be sorry to have such a thing happen. You see, I don't help him on in these things that he threatens, and he can't very well do them alone. It is hard to hit a smiling man on the nose.

Well, to cut a long story short, I didn't know then that the world had so much use for a smiling man.

I wish you would remember that I don't mean to praise myself, but I wanted to tell you a true story. Now comes the sweetest part of all—the children. Did I scold them when they came by the dozen to my store and asked to just hunt the candies over to find certain mottoes? No; I said "Go on, little ones, and do as you please. Take such as you wish."

Then once in a while I would pass a pound or two of fine candy over the show-cases, just to see about 20 school children pick it up. The result was that the profits on my candy trade alone about paid the wages of my clerk. "As ye sow, so shall ye reap."

Then the Sabbath school—yes, it is not much wonder that my eyes do get a little dim as I think of the Sabbath school. Why is it that the children bring us so many berries, flowers—in fact, everything they can think of—and make us accept of them? It must be because we put a little chunk of boney in their hands when they come to see us, and we don't forget to smile.

Well, the boys don't steal our bees, nor our honey, nor pears, nor apples, nor grapes, nor plums, nor anything we have, because we smile, and give them some anyway.

Now, Bro. Clarke, all us older ones are simply large children. We like the same smile, the same kind words, the same attention, and praise, that we did when small. We can be quite in earnest without being angry. I have had occasion to write convincingly sometimes, but I never remember writing an angry word in my life. Let us all remember the many thousands that read the BEE JOURNAL, and might be hurt by reading angry words, or be made better by good words.

Ovid, Pa.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

☞ "I find that I can get along without the BEE JOURNAL about as well as a sailor can without a compass."—James I. Click, of Ohio, July 30, 1894.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Persimmon as a Honey-Yielder.

As Dr. Miller has failed to answer N. L. V., on page 106, I beg leave to offer an answer.

The persimmon is one of the best honey-yielders. Its bloom is *dioecious*, like that of the black-gum—that is, its staminate and pistillate flowers are on different trees. The male flowers are on one tree, and the female on another. The bees work more on the male bloom than they do on the female. This, no doubt, is a wise provision of Nature, by depositing more honey in the male bloom, the bees are more attracted to it; and more pollen collected to insure the fertilization of the female flower.

The persimmon is a tree of easy cultivation, and the fruit, when fully ripe, is quite palatable. The wood is hard and dense, and good for a variety of uses. J. P. H. Brown.

Augusta, Ga.

Good Honey-Flow from Sourwood.

The honey-flow from sourwood is just now closing in this locality. The flow was continuous for 30 days or more, and all the bees with numbers sufficient have done well. In the spring, after the freezes, I did not expect a pound of surplus honey, but I have taken over a ton, and my bees are rich with stores for the winter. H. F. Coleman.

Sneedville, Tenn., July 31.

Booming on Mountain Flowers.

Bees are just booming on mountain flowers now. The mercury has been hanging around 90° Fahr.; but we have had no "hot waves" such as Mrs. Atchley speaks of, thank the Lord!

W. M. Barnum.

Denver, Colo., Aug. 1.

Short Crop, but Nice and White.

Bees have done reasonably well, considering the dry weather. I finished extracting honey last week, taking nearly 200 pounds. Bees have not been ready sale, and consequently have a fine lot of combs built in my nuclei hives, which is quite a gain to me. The weather is very dry—has been since May—so our honey crop will be short; but the honey is very nice and white.

Mrs. A. A. Simpson.

Swarts, Pa., Aug. 1.

Some Honey from Basswood.

Basswood honey is now gathered. It commenced to yield on July 10th, and lasted 17 days. I got 5,000 pounds of very nice honey from 120 colonies, spring count. Two years ago I had that much from 65 colonies, so I don't think it pays to have too many bees in one place.

J. R. Kauffman.

Bellaire, Mich., Aug. 6.

Won't Get Any Surplus Honey.

On July 8th we had a hail-storm which destroyed all our crops, so the bees had to fly 3 or 4 miles to get food, but the weather has become so dry since then, the farmers that did not get hailed out, burnt up, so there is nothing left for our bees to eat but sugar syrup. I think its a settled fact that we won't get any surplus honey this year.

J. C. Knoll.

Glenwood Park, Nebr., Aug. 1.

Honey from Daisies, Etc.

The daisies have passed away (referred to in my last report), but the honey still remains. I have quite a lot of that sort of honey in sections, and think that many of my colonies have enough daisy honey to carry them through the winter, or nearly so; at any rate it kept the bees busy, and kept up breeding at a good rate, and also swarming. My first swarm came out on May 25th, and the last one, so far, on July 19th; so they were swarming nearly two months.

Basswood came out in good shape (about July 10th), with a heavy bloom, but there is so little of that sort of timber here now, and the weather was so hot, and had become quite dry, consequently we only got a light yield of white honey. No white clover this sea-

son, as it was killed by the long-continued drouth last season.

I find there are some mean folks yet, even in this section, and some one or more of them came into my bee-yard a few nights ago, and took the only case of white honey filled at that time, in the yard. I had tiered them up a short time before, so they showed big on that particular hive. I do not like this tiering-up business, for I always have some bad luck connected with the arrangement.

As I handle bees, I am led to notice the difference in them. Last season I had a medium-sized swarm the forepart of June, and the 16th day after being hived they swarmed with the hive full of honey. This spring they swarmed the 25th of May, and the young swarm swarmed again the 2nd of July. It was the same queen. H. F. NEWTON.

Whitney's Crossing, N. Y., July 31.

Bees Doing Well.

Our bees are doing well so far, and the prospect is good for the rest of the season, as we have just had a splendid rain. MRS. LUCY C. SLEASE.

Roswell, N. Mex., Aug. 2.

No Honey and No Swarms.

We are left out on the honey-business again this year. Bees did fairly well on white clover, but it lasted only a short time, on account of the drouth. About the time bees commenced to work in the supers the honey-flow stopped and left us without any surplus. I have 48 colonies, and did not have a swarm from them, so it looks as if I have the non-swarming bees, if any one has.

W. S. FEEBACK.

Carlisle, Ky., Aug. 1.

Bee-Keeping in West Virginia.

Seeing no report from this State in the AMERICAN BEE JOURNAL, I concluded I would try to give a little sketch of the bee-industry, although it was too wet for bees to gather much honey till about June 20th; since then I consider bees have done fairly well. I will tell what my bees have done, and then you can be the judge, as I have been in the bee-business or trying to learn to handle a few colonies of bees, only two or three years. I got through the winter with 12 colonies—all blacks—have increased since June 20th to 25 colonies, putting two second-swarms together, thus making the odd number. All swarmed once, and in from 20 to 25 days after swarming each hive, both parent and swarm, gave one super of surplus honey, each super carrying 28 one-pound sections.

There are but few people in this part of the country using frame hives. I tell them they are keeping bees for pleasure only, as they can't make profit out of bees in box-hives or hollow logs. I can't persuade them to subscribe for the "old reliable" AMERICAN BEE JOURNAL. They generally say they can't learn anything by reading a bee-paper, but I would not be without the AMERICAN BEE JOURNAL for four times its price, as I have learned a great deal in it, and I continue to learn a few lessons from every copy. IRA SHOOKEY.

Long, W. Va., July 31.

Only About Half a Crop.

The honey crop is unexpectedly short in this locality. The white clover bloom was rather deficient, but the weather was favorable and the bees built up strong. Basswood promised an abundant bloom, and up to the morning of July 5th all seemed favorable towards a full crop; but in the afternoon of that day came on a storm and the wind changed to northwest and blew extremely cold for four days. It then relaxed a little for two days, and the bees just got nicely at work when the wind again sprung up directly from the north, and continued for two days more, and remained cool until basswood bloom closed out. The result is but little if any over a half crop, with many unfinished sections. D. MILLARD.

Leonidas, Mich., Aug. 7.

No Honey in Southern California.

I have yet to hear of any surplus honey here in Southern California produced this year, and present indications point to a probable loss by starvation of half of the bees before another season. The majority of bee-keepers are poor men, and as a result will be forced to let the bees care for themselves. I expect to return home the coming week, but will look the bees over again in September, and, if necessary, feed up.

GEO. W. BRODBECK.

Arrowhead Springs, Calif., Aug. 2.

☞ "I have been highly pleased with the BEE JOURNAL since I have had the pleasure of reading it."—Frank W. Culver, of Illinois, July 23, 1894.

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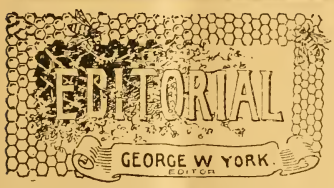


Look Well to your bees. Don't let them starve. See to it that each colony is supplied with stores, if they are not gathering any nectar from the flowers. The recent rains will no doubt help in many localities to insure honey for winter stores, if not a fall surplus.

Bro. Ernest Root, the Associate Editor of *Gleanings in Bee-Culture*, expected to be in Chicago the forepart of this week, and promised to call at the BEE JOURNAL office. He is on a visit to bee-keepers, riding his bicycle, and doubtless has seen quite a number of them while on his trip. Next week we shall be able to say more about our brother editor, who delights to sail around the country "on a wheel!"

The Next President of the North American Bee-Keepers' Association is already being speculated about "down East," we notice by the August *American Bee-Keeper*. It says: "We understand there are several candidates for President for the coming year," etc. That certainly is news here in the West. Why not think of a new Treasurer, instead, as we have held the heavy (!) "money-bag" of the Association for two years, and are ready to be relieved.

St. Joseph and N. W. Missouri (Illustrated) is a souvenir edition of the St. Joseph, Mo., *Daily News* recently issued. This is a book of over 140 pages, about 11x18 inches in size, and its object is "to show the advantages of St. Joseph and that section of the State as a desirable place of residence." It is beautifully printed on fine paper, and is indeed a pleasing "souvenir." We want to thank Bro. Abbott—the genial President of the North American, who lives in St. Joseph—for his kindness in sending us the above book. By the way, Bro. A.'s portrait graces one of its pages, including a short biographical sketch.

Buffalo, N. Y., is being urged by the *American Bee-Keeper* as the proper place for holding the North American bee-convention in 1895. *We* have no choice whatever in the matter, but presumed that Toronto, Ont., would have first claim, as we believe it stood second when St. Joseph, Mo., was selected last year. But we haven't the least objection to Buffalo for next year. Besides, Vice-President Hershiser lives near there, and doubtless would be glad to make the necessary arrangements for the meeting. He'd do it well, too.

Extra Honey-Gatherers.—A subscriber to *Gleanings* wished "to know whether it is possible to breed a queen whose workers shall be extra honey-gatherers, by tinkering or doctoring with the larvæ of said queen before she hatches." Bro. Ernest Root answered the request for information, as follows:

"Certainly not. This thing has been brought up several times before, and certain old fogy bee-keepers have wisely said

they had the secret of manipulation, which they said they would sell for a certain sum. Man cannot step in and interfere in this fashion with the processes of nature. The only way to get extra honey-gatherers is to breed by selection—that is, by breeding from queens whose progeny excel others in the yard; and by this process, in time, a race of workers more energetic than the average might be secured.

"For some reason or other, but little attention has been paid to bees for business. The whole rage nowadays seems to be for *color*—five bands, etc. This is all right in its place, but we hope as much—nay, *more*—attention will be paid to bees for energy and longevity—in general, bees for business, because it is from these that come the dollars and cents. Extra color alone will not add another cent to the pocket-book, except—that of the queen-breeder, who breeds them just because his customers demand them."

Are You Going?—It's less than two months to the meeting of the North American at St. Joseph, Mo., on Oct. 16th, 17th, and 18th. Are *you* going to be one to help swell the number at that grand rally? Better go, if you can possibly arrange to do so. *We* now expect to "get there." But we are more anxious that others should go, who would be missed more than we would be. We hope that the old as well as the new friends may be able to attend. President Abbott expects all, and is preparing for a large crowd.

Bro. Roese, of Maiden Rock, Wis., has indeed had his full share of discouragements the past year or two. We have received the following letter from him, dated Aug. 7:

DEAR FRIEND YORK:—As I am confined on account of ill-health, but able to write a few lines to you, I will do so, for I know you are always glad to hear from bee-keepers. Calamity and misfortune seems to have been my lot of late. Since my first attack of "la grippe" two years ago, I have not been myself. It took all my usual ambition, energy and enterprise, and to care for my bees proves a task to me. But what addeth more to my discouragement, of late, is the coming home of my daughter from the Battle Creek, Mich., Sanitarium, sick with consumption. She was there engaged in medical missionary work, and must have contracted the disease in some way. And shortly after her arrival home, my wife met with an accident—breaking her collar-bone, by being thrown from a wagon. But let come what may, I do not despair, so long as friends prove faithful, and God is the over-ruling power of all.

I hope that Providence may with protecting care watch over your life and health, and future prosperity.

Yours truly, STEPHEN ROESE.

We want to assure Bro. R. of our heartfelt sympathy in his many afflictions. It certainly takes a brave heart to bear up under them all. We do hope that he and his beloved wife and daughter may each be fully restored to perfect health, and once more enjoy life's pleasures.

Wonderful Upholsterers!—In the Chicago *Daily News* a short time ago was found this wonderful (!) bit of bee-information:

SKILL OF THE BEE.—The bee is an artistic upholsterer. It lines its nest with the leaves of flowers, always choosing such as have bright colors. They are invariably cut in circles so exact that no compass would make them more true.—*Exchange.*

What a beautifully "upholstered" mind the fellow must have had who first originated this dainty bit of nonsense! When will the newspapers cease trying to give information on subjects they know nothing about? The question is easily asked, and only easily answered by quoting, "I don't know!"

The Carniolan Bees.—An exchange published in the State of Washington, contains this from a bee-keeper having some experience with the Carniolans:

Mr. H. W. Pallies says that his experience in shipping queens from the East has proven almost an entire failure with but one exception, the Carniolan bee. He says of this bee that he thinks it is the future bee for western Washington. The warm weather in February brought out the bees, and started them to work, when winter afterwards set in, in March, suppressing the workers. This is largely the cause of the shortage in honey this season. He claims of the Carniolan bee that it is not only hardier for shipping, but working as well. He claims also that they are better honey-gatherers, and easier to handle than any other bee he has ever tried.

Editors and Doctors.—One of our subscribers says in a letter, "But editors and doctors usually receive their pay last.' That man told the truth then, if he never

did before. But why should the doctor or the editor be the *last* to be paid. A good doctor is your best friend—then why neglect him? The editor of your helpful paper certainly deserves good treatment, for he usually works hard enough for what he does or doesn't get. But some day things will be different, for you know the "Good Book" says, "The last shall be *first*," etc. Then the editors and doctors will have their turn.

Oh, but the doctor and the editor have use for the grace of patience! What a blessing—to be patient. 'Tis said that "all things come to him who waits." But another also says "things come" much quicker if they're gone after.

Propolis for Corns.—Dr. Peiro has kindly translated the following for the BEE JOURNAL:

The *Revue Internationale D'Apiculteur* copies the statement that propolis has been found an effective remedy for painful corns. The sufferer made small plasters by spreading it on pieces of linen, warming the same slightly, and applying. In a few days all pain was gone, and the wearer could climb the mountains with perfect ease.

All Mothers should carefully read Dr. Peiro's department this week, and heed the wise suggestions he offers there. His article on "The Mother and Daughter" should be widely copied and read, for by following the hints it contains, many a daughter's life will be made happier, and her future welfare assured. Oh, so much responsibility rests upon mothers! Let us hope they will assume them, and discharge the duties faithfully, and with great profit to their children, who in after years will rise up and call them truly *blessed*.

Bro. Allen Pringle, of Canada, occupies two pages of *Gleanings* for Aug. 1st, with a very interesting article on "Honey Tariffs." This sentence will show the stand he takes:

If any foreign producer of the United States or any other country, can bring his honey here, 100 or 1,000 miles, paying freight, insurance, etc., and can afford to sell my neighbors and customers *pure* honey, as good in quality as mine, at a price lower than I am charging them, then I say, "Well done; welcome, stranger! you are the people's friend if not mine—you are either an abler man than I am, or more honest, or perhaps both."

California Honey-Plants.—Prof. Cook gives in *Gleanings* the principal sources of honey in California, so far as he has observed this season. They are as follows:

White sage, *Audibertia polystachia.*
Ball (or black) sage, *Audibertia stachyoides.*
Ball (or black) sage, *Audibertia Palmeri.*
Ball (or black) sage, *Audibertia Clevelandi.*
Blue phacelia, *Phacelia tanacetifolia.*
California clover, *Hosackia glabra.*
Small blue phacelia, *Phacelia circinatax.*
Wild buckwheat, *Erigonum taxiculatum.*

This last and the sages are the important honey-plants. They yield enormously, remain in bloom a very long time, and the honey from them is unsurpassed in appearance and flavor.

Of course, the fruit-bloom is very important. Much of it comes so early that the bees are not yet strong enough to secure much surplus from this source, though fruit honey is not infrequent in the California markets, and is far more important aside from mere stimulation than is the same in the East.

The above report of flowers is not full, but contains the most important. I ought to have included a small strawberry, or blackberrylike flower, *Horkelia Californica*, which is constantly visited by bees.

Saves Big Doctor Bills.—Bro. Leahy gave "Our Doctor's Hints" this much appreciated editorial notice in his spicy little monthly, the *Progressive Bee-Keeper:*

The "old reliable" AMERICAN BEE JOURNAL is trying to supply all needs of the bee-keeper and his family, "Our Doctor's Hints" being the last department added. It is quite instructive, and if heeded will save much suffering and big doctor bills.

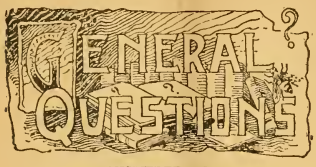
Husking Bees.—Here's another one on the "city chap," taken from the *Youth's Companion:*

"Bless me, my boy," said the country uncle, "there's no end of fun down at our place! You must come and see us in time for the husking-bees."

"Deah me!" said the city nephew, nervously. "I shouldn't care evah to husk a bee, unless some one would first wemove the stwing!"

Rambler says in *Gleanings* that Prof. Cook recommends fumigation with burnt coffee to take skunk odor out of clothing; and suggests that the Professor "has been there with his Sunday clothes on, and knows!"

Great Premium on page 254!



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

What About House-Apiaries?

Are house-apiaries a success generally?
D.

ANSWER.—At one time they were spoken of with a good deal of favor, but after a time seemed to fall into disfavor and were mostly abandoned. Of late, however, a few bee-keepers have again tried them, and are quite emphatic in their favor. Among these are B. Taylor and H. P. Langdon. Whether others will be equally successful remains to be seen.

Anxious to Get Increase.

I have had some experience in the bee-business this season, and I think I have learned something, but now I am lost to know what to do. In the month of June I doubled a colony by taking two frames out and putting into a new hive with the old queen with them, then placed the new hive on the old stand, and after three days a Carniolan queen was introduced, and the first time I opened the hive I found her, but she took to the wing, so the colony was left queenless again.

I then sent for another queen and introduced her. I gave them a good smoking, so as to make it sure, but I have not been able to find her. The old brood has now all hatched out, of course, and now there is none in the frames—nor as many bees as two weeks ago. The bees have brought in quite a good deal of honey. Now what shall I do? I wish to increase, if possible. The new colony on the old stand has done nicely, are packed completely full of bees—I have not seen a drone yet, and have not found a queen-cell in either colony started during the season. E. H. H.
St. Johnsbury Center, Vt., July 30.

ANSWER.—As you are anxious to increase, your easiest way may be to give the queenless colony a frame of brood from the other colony, and in about three weeks time they will have a laying queen of their own rearing. If the other colony can spare it, give several frames of brood.

Tongues of the Carniolans.

Have Carniolans as long tongues as Italians? E.

ANSWER.—From the fact that I don't remember that their friends have ever claimed that their tongues were longer than those of other bees, or that their foes claimed they were shorter, I suppose they are of the same length.

Preventing the Issue of Swarms.

Dr. Miller states somewhere in a recent number of the BEE JOURNAL, that he hopes to never see another swarm in his apiary. Will he be kind enough to inform the readers of the BEE JOURNAL what he does to prevent the issue of swarms? and outline his plan of management during the swarming season?
Seattle, Wash. S. D. C.

ANSWER.—Now look here, are you sure I said I hoped never to see another swarm in my apiary? I don't know the place to which you refer, but I'm pretty sure if I said so I didn't tell the truth. Much as I should like never to have another swarm, I'm afraid they will put in an unwelcome appearance in the future as in the past; and hope means not only desire but expectation as well.

I have never succeeded in the entire prevention of swarming, but possibly it may do some good to tell one of the ways I have managed with swarming colonies. When a swarm issued, the queen was caged and kept in the hive till I was ready to attend to the case, which might be any time within five days. Of course if I was ready to attend to it right away it might be done then, but as a matter of fact I think the queen was always left caged for a day or so.

I took out the combs of the hive, one by one, shook off about half the bees, putting the combs with the remaining bees in a new hive. Then I put in the old hive a frame of young brood and two or three empty combs, sometimes

filling up the empty space with dummies, but oftener not. The super or supers that had been on were put back on, and covered up, then on top of this I set the new hive, giving it the queen. In about ten days from the time the swarm issued, I took away the old hive and put the new one down in its place.

Sometimes the colony swarmed a week or two after the queen in the new hive was put down, in which case it was treated just the same as the first time it swarmed.

The secret of success with this management lies in the fact that when the brood, queen and part of the bees are put in a hive and set on top, all the field bees leave it and go below, no honey is brought in, and under such circumstances the idea of swarming is given up and all the queen-cells torn down. And when the bees undertake to tear down queen-cells, they never miss any as you do.

If there is no one to watch for swarms, you can put a queen-trap at the entrance. Then when the swarm issues the bees will go back, and the queen will wait in the trap till you are ready to attend to her.

Fine queen-cells will be reared in the frame of brood left without a queen, and when the queen is put down you can set the old hive and its contents on a new stand, and you have a good nucleus started.

You might think that if the empty space in the hive were not filled up with dummies the bees would build comb in it. But I didn't have trouble in that way. Queenless bees are not much given to building comb.

But I've done nothing on that plan this year. For this year I've had my wish, and I haven't seen a single swarm. But along with it I've had something I didn't wish for, and I haven't seen a single section of surplus honey. I think I'd rather have the swarms than to have an entire failure of the honey crop.

Color of Box-Elder Honey.

What color is box-elder honey? W.

ANSWER.—If any one knows the answer to the above conundrum, will he please rise and give it. I confess I do not even know what the honey of *any* of the maples is like—box-elder is ash-leaved maple. The hard maple and the soft or red maple are considered abundant sources of honey, and they are so common that some one ought to be able to tell what the honey is like, and it is possible that in some places the ash-leaved maple or box-elder is so abundant that its honey can be identified.

One reason that honey from any of the maples is not so likely to be known is, that it comes early in the season, when it is all used up for brood-rearing. For this same reason it matters very little what its color or taste may be, only so the bees get enough of it.

The Clover.

BY JAMES WHITCOMB RILEY.

Some sing of the lily and daisy and rose,
And the pansies and pinks that the summer time throws
In the green, grassy lap of the medder that lays
Blinkin' up at the skies through the sunshiny days;
But what is the lily and all of the rest
Of the flowers to a man with a heart in his breast
That has dipped brimmin' full of the honey and dew
Of the sweet clover blossoms his boyhood knew?

I never set hevey on a clover field now,
Or 'fool round the stable, or climb in the mow,
But my childhood combs back just as clear and as plain
As the smell of the clover I'm sniffin' again;
And I wander away in a barefooted dream,
Where I tangled my toes in the blossoms that gleam
With the dew of the dawn of the morning of love,
Ere it wept o'er the graves that I'm weeping above.

And so I love clover—it seems like a part
Of the sacredest sorrows and joys of my heart;
And wherever it blossoms, Oh, there let me bow
And thank the good Lord, as I'm thankin' Him now;
And pray to Him still for the strength when I die,
To go out in the clover and tell it good-by,
And lovingly nestle my face in its bloom
While my soul slips away on a breath of perfume. —*Exchange.*

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

The Mother and Daughter.

DEAR MRS. LOVEJOY:—I am so interested to hear from you, and hope to add such suggestions, from a medical stand-point, as may throw a soft light on some of the duties of a mother that at times are overlooked. I fully enter into your feelings and anxieties, well knowing that cares must come to daughters which only the loving counsel of a generous mother can modify or prevent. Upon such timely advice may depend happiness, or life, itself.

Girls usually are endowed with much sentiment—a sweet element in their nature, if properly guided. More than boys, are girls sensitive to tone of language and to acts of kindness. That mother makes a serious mistake who feels it necessary to scold and humiliate her children. Such irritableness can only lead to one sad end—the loss of that filial regard, so dear to the heart of a mother.

At best, the first 20 years of a girl's life at home is next to drudgery, unless the many burdens are lightened by a mother's love and devotion. From her earliest years, the daughter takes even serious parts in the family circle; not infrequently circumstances conspire to make demands upon her developing physical forces that were much better conserved for years when Nature will bring under tribute the utmost resources of mind and body. Then, mother, dear, let your smiles and encouraging words far exceed your looks of reproof! Begin in babyhood to teach your child a mamma's deep love, and, when a schoolgirl, be not annoyed at the many problems that look to you for solution. Do not think to appease the many enquiries by evasions or rebuffs. Questions *must* be answered by you, or left to less competent, because less sympathetic, substitutes.

From childhood your daughter should be encouraged to best endeavors in the appreciation of that which is noblest in a social and literary sense. She should be early taught to seek companionship of the innocent and pure as playmates, and instructive books for the lonely hours. If not gently directed to these, she may easily be misled by wrong influences in this the formative period of her life. Far better for her to acquire good tastes and judgment *now*, that she may the easier reject less profitable opportunities in years to come.

Let her mind and ideals have the widest scope, that she may the better judge, in the future, as to the merits of her surroundings. The highest advantages are not possible to *all* parents, I fully recognize, but I do know that many more, and greater, are quite within the reach of fathers and mothers who do not think it important that their children should possess them.

If need be, get books, pictures, papers less often, but get the best you can afford when you buy. Flowers are always sources of inspiration to girls. Hence, surround your home with many. In that corner of your house should grow two or three climbing roses; at the porch train a couple of clematis, a white and blue—their contrast is very effective; on each side of the walk plant several hardy roses, and close to its border a row of tulips for early flowering. To this list add what you both think attractive. By consulting your daughter's wishes, you also teach her the necessity of proper selections. Now, these plants will cost comparatively little, and with such care as the girl may be taught to easily give, you will have beautiful plants and flowers for years to come!

Just call to mind when *you* were a girl—the pride and satisfaction you experienced in receiving your young company in as pleasant and inviting surroundings. And your daughter is only a second edition of her good mother! Hence, nothing wonderful that her tastes and ambitions should so closely resemble.

One observation more, and I am done for the present. Mothers, *don't* be prudish to the extent of keeping your daughters in ignorance of the changes that are certain to come when years of puberty advance. How many girls have been terribly frightened at the first occurrence that marked the transition from girlhood to womanhood! She ought to have been advised in time, that she might have been prepared for this wonderful and new experience in her immediate life. You have been remiss in your obvious duty to her, if you have not, at some quiet moment, fully explained the nature and the purposes of this physio-

logical change, and the manner of caring for herself at such a time.

Also, it is at this period of her young life, when nature makes urgent demands, that temptations are least resistible; it is then that her intelligent assurances are the bulwark of her heroic courage!

Finally, you will have evaded your special duty if, at the proper time, you have not fully suggested the inevitable responsibilities of married life, and have entered heartily into all the plans that tend to make a happy home for your daughter and acquired relations.

I fully trust to your good motherly judgment to consider the propriety and wisdom of enlarging on the suggestions here made. There is so much we all must learn by stern experience, and if happily some facts come to us in a milder or less exacting way, how grateful we should be! And to whom may a girl look for wisest counsel more than her mother?

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Oct. 4.—Utah, at Salt Lake City, Utah.
Jno. C. Swaner, Sec., Salt Lake City, Utah.

Oct. 16-18.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.

Sept. 11-13.—Nebraska State, at Lincoln.
L. D. Stilson, Sec., York, Nebr.

Sept. 15.—S. E. Kansas, at Bronson, Kan.
J. C. Balch, Sec., Bronson, Kans.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Feeder—Swarming—Rains.

I have received a bee-feeder from P. M. Roby, of Kansas, that I believe is far ahead of all feeders. It hangs in the hive the same as a frame, and is so constructed that any amount can be fed at a time.

Some are wanting to know that remedy I have for swarming, that I spoke of when talking about non-swarming bees. All right; I will give the remedy in full, as soon as I have time.

We have had good rains lately, and fall flowers are springing up everywhere. It rained three hours yesterday, and yet looks like rain. I trust we may have a good fall flow. JENNIE ATCHLEY.

Honey-Plants of Texas.

As we must know our honey-plants as well as our bees, if we wish to succeed, I will describe those giving our surplus, and blooming-time of the same.

First, I will begin with fruit-bloom, which is usually first in almost all States. That gives us much honey, and fruit-bloom in this State (Texas) some times gives a fair crop of honey. One year I harvested 30 pounds per colony from peach-bloom alone.

As fruit-bloom comes first, we had better see that all the bees have plenty of honey just after the close of fruit-bloom, as some seasons the bees get only honey enough from this source to get them started to brood-rearing largely, and if two weeks of bad weather, or two weeks without gathering any stores after fruit-bloom, may find many strong colonies starving, as it takes large quantities of honey to rear a large number of bees.

The next we have in Texas is horse-

mint (I am now giving the honey-plants of North Texas). This begins to bloom about May 20th, and fruit-trees usually bloom in March and go out by April 1st. So you can see the hard time on bees in North Texas, from April 1st to May 20th—nearly two months. Then comes a harvest from mint, if we have kept the bees going, otherwise the harvest comes and no reapers, which means a great loss.

Then after mint comes cotton, making a continuous honey-flow from May 20th to Sept. 1st. There are some plants not mentioned that usually keep the bees out of mischief, and giving honey sufficient for brood-rearing, but no surplus—such as ratan, milkweed, poison-vine, and others. But the honey harvests come from mint and cotton.

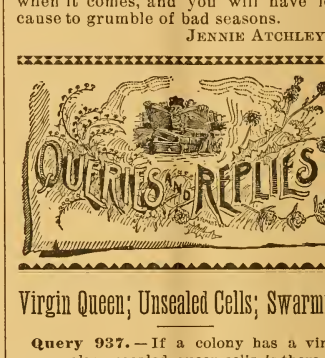
From middle Texas we get fruit-bloom in February, and mint on May 1st; and west Texas, buffalo clover in May, and sumac in August. These are splendid honey-plants, and the management should be the same in all localities where there usually comes a dearth of honey between fruit-bloom and our harvests.

In southern Texas we have wild currant in January, fruit-bloom in February and March, and when weather is favorable we get some surplus from these. April 1st we get a good crop of honey from catclaw and other plants. This lasts until May 1st, when horse-mint begins, and lasts until June. Then mesquite begins, and we have here at this place (Beeville) a steady flow from April 1st until July—three months. Mesquite ends our summer flows, but when we have fall rains we get a splendid flow from flaxweed, called by some "broomweed," as it will make brooms. After broomweed we get no more until spring.

Bees usually begin swarming in north Texas on April 1st, and in the middle portion about March 15th, and here in southern Texas about Feb. 15th. These are the dates of the early swarms, and bees swarm on through the spring months until July, which usually puts a stop to swarming in Texas, unless we have good fall rains, then we sometimes have fall swarms.

I will give the honey-plants by States, giving the names and blooming time of all the principal honey-plants, or those that give our surplus, and to get a good honey crop we must have our bees strong at the time of the beginning of our honey-plants. This is why I am going over this ground so carefully, as much depends upon the management of our bees before the harvest comes, if we wish to keep out of "Blasted Hopes;" so I cannot close this, it seems, without rehearsing the warning note: Keep your bees breeding, and get them in *first-class* condition to reap the harvest when it comes, and you will have less cause to grumble of bad seasons.

JENNIE ATCHLEY.



Virgin Queen; Unsealed Cells; Swarming

Query 937.—If a colony has a virgin queen, also unsealed queen-cells, is there any danger of swarming?—Virginia.

Yes.—EUGENE SECOR.

Yes, certainly.—J. H. LARRABEE.

Yes, in the swarming season.—DADANT & SON.

No, not as a rule. Destroy the queen-cells.—G. M. DOOLITTLE.

Yes, if other conditions are favorable to swarming.—J. A. GREEN.

Yes, sir; there is some danger of swarming.—J. P. H. BROWN.

I think usually not, but I shouldn't count too safely on it.—C. C. MILLER.

Yes, if the swarming season and impulse is prevalent.—J. M. HAMBAUGH.

Yes, providing the virgin does not destroy the other queen-cells.—JAS. A. STONE.

Most assuredly. This is always the case where second swarms go out.—A. J. COOK.

Why, yes, that is about the condition when I should expect a swarm to issue.—C. H. DIBBERN.

Yes. If the extra cells are left in the hive, and the bees do not destroy them, they will swarm.—E. FRANCE.

If the colony has already cast a swarm, yes. They often throw off after-swarms.—MRS. J. N. HEATER.

Certainly, if in the season for swarming, and even if a little out of that season if the colony is very strong; but of

course other circumstances, as the weakness of the colony, or the dearth of honey, may remove that danger.—R. L. TAYLOR.

That depends entirely upon the strength of the colony, the time of year, and the honey-flow.—EMERSON T. ABBOTT.

Yes! the young queen may induce swarming; if they did not intend to swarm, the bees would destroy the cells. —MRS. L. HARRISON.

They have been known to swarm under the above conditions, but not as a rule; for the second swarm issues about the time the last of the batch of cells are sealed.—S. I. FREEBORN.

Yes, there is a chance for it. Such pointed questions as this are very difficult to answer; not knowing any of the conditions, they have to be guessed at. I would suggest that our querists be a trifle more explicit.—W. M. BARNUM.

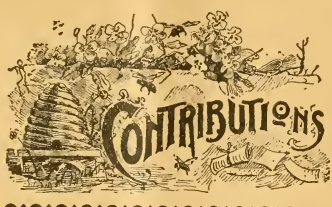
Yes, if the bees are strong and prosperons, especially as soon as the cells are sealed. If a colony of bees has any kind of a lively queen, and queen-cells sealed or unsealed—if the cells are not destroyed promptly, you may expect a swarm.—MRS. JENNIE ATCHLEY.

Who can tell? I confess that I can't even guess. Much will depend upon the season, the condition of the colony, and other factors in the problem. What is the cause of the "virgin queen, etc.?" That cause being given, the question could be more easily answered.—J. E. POND.

If a colony has a virgin queen, or a queen not a virgin, it will not have unsealed queen-cells, unless it means to swarm. As soon as a queen is hatched, all queen-cells will be destroyed, unless the bees mean to swarm. The larvæ will be removed from unsealed cells, and the food in them consumed.—M. MAHIN.

Yes, if the season is propitious, and the swarming fever is on, the chances are in favor of a swarm. Under such circumstances, you can never be sure that no swarm will issue until cell-building is abandoned by the worker-bees, and the virgin queen has undisputed right of succession.—G. W. DEMAREE.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of this number of the BEE JOURNAL for description and prices.



Bee-Paralysis Caused by Starved Brood.

Written for the American Bee Journal

BY WM. M'EVOY.

Partially starved brood is the whole cause of the bee-paralysis.

For several years I warned the bee-keepers in times of sudden checks in the honey-flow, to look well after their bees, and either uncap honey in the brood-chambers *in the evenings*, or feed so as to keep the colodies well supplied with *unsealed* stores.

Brood is always well fed when the colonies have abundance of *unsealed* stores. But if a check takes place so as to stop a honey-flow suddenly, while colonies have a large quantity of brood on hand, the bees will use up the *unsealed* stores very soon, and then the bees won't uncap the sealed honey fast enough to keep pace with the amount of brood that requires feeding. Soon after that the small larvæ will be found looking like little dried worms in the bottom of the cells without a particle of food. In some cells ready to cap, will be seen some of this starved brood, with a brownish color, lying on the lower side of the cells and turned up a little. Some of the capped brood dies through not being fed enough to last until hatched. And some of the bees that do hatch out of this scanty-fed brood, will be a day or two longer in hatching, and, when hatched, some of these bees will be dark in color, and scarcely able to fly. And when the owner sees the bees of the same hives in some cases killing off these useless bees, he will be apt to think them old, worn-out bees that are being killed off.

If the bee-keeper would see that his colonies of bees had plenty of *unsealed* stores while brood-rearing is going on, he never would be troubled with this state of things in the apiary.

I have just read the very valuable item on this subject, from Prof. Cook, on page 137. Prof. Cook has given out

the *only cure*, and it is simple enough. I say "only cure," because it was caused by partial starvation, and feeding *will cure it*. I always push the feeding to the front on my rounds through Ontario.

Well done, Prof. Cook; you have given both the cause and cure. This makes the second time that Prof. Cook has done big work for the bee-keepers. His first was settling, by test cases, the disputes between the bee-keepers and the scientists over the spraying of fruit-trees while in bloom.

Woodburn, Ont., Canada, Aug. 6.

Bee-Notes and Comments.

Written for the American Bee Journal
BY DR. C. C. MILLER.

COTTON-WASTE. — That cotton-waste for smoker fuel, on page 167, is a good thing. I tried it, on Mr. Highbarger's recommendation. It is used *after* it has been used on axles of cars, and has been thrown away.

CLAMP STAPLE.—The same gentleman gave me a sample of clamp staple that is worthy of being more fully known. It is simply a very light staple bent in the form of the letter U, only bent at right angles instead of curved. The middle part is perhaps an inch, and the two legs not so long. For fastening the bottom to a hive, or to fasten the top for hauling, I don't know that I've ever tried anything I like so well. I don't know the expense, but it must be very trifling. From what Friend Highbarger said, I supposed they could be found in any hardware store, but I don't find them in Marengo, and I want to lay in a stock before fall.

WIRE-SCREENED PORCH.—I commend to the brotherhood that wire-screened porch of Bro. Lyman (page 168), especially as it is worth all its cost aside from the bees. At Huntley, 12 miles east of here, such porches are quite common, and I see they are working in here. It is pleasant to have the porch entirely free from flies and mosquitoes.

DANDROLICON.—If Dr. Peiro would color vaseline blue, perfume it heavily, and put it in two-ounce boxes, labeled "Dr. Peiro's Dandrolicon," price $1.25 per box, I suspect there might be more dandruff cures than will come from his very plain, common-sense directions on page 172. Now, Doctor, can you give A. I. Root and me a prescription to stop our heads growing up through our hair? or is it too late?

SYMPATHY.—However "broad" may have been my smile on reading Emm Dee's first article, my sympathies are fully aroused on reading the contrite confession of failure and punishment, on page 180. I'll not repeat the proverb, "Pride goeth before, etc." Here's wishing you better success in the future, Emma.

MILLER FEEDER. — I think Edwin Bevins (page 182) would be better satisfied with a Miller feeder than with his arrangement. With that, he could feed anywhere from an ounce to 20 pounds, fill up at any time without the possibility of a bee getting in the way, and with little labor and expense.

WIRED FRAMES.—John A. Balmer's interesting report of that 2,300-mile ride for his bees (page 183) is a strong argument in favor of wired frames. I think it quite likely that wiring might have saved those four colonies. With wires, a comb may become very soft without breaking down. But let an unwired comb break down, and the excitement of the bees increases the heat, making a general smash of all the combs, and the ruin of the colony.

SULPHUR FOR PARALYSIS.—If cures of paralysis by sulphur keep coming in without any failures, the case will look quite hopeful. Has any one tried it and failed?

"TAKEN DOWN."—On page 192, Doolittle's old man seems to be quite "taken down." Any one who would do anything to take down such a forlorn, dejected looking creature must be very nearly heartless.

Marengo, Ill.

Suggestions Regarding Bee-Paralysis.

Written for the American Bee Journal
BY ADRIAN GETAZ.

Some of the readers of the BEE JOURNAL will be somewhat astonished to learn that bee-paralysis has always existed here, more or less, in all or nearly all the apiaries; at least for seven or eight years, and probably much longer. Nevertheless it is a fact. The malady is much worse some years than others, and generally much worse in the spring, precisely when we can the least spare the bees. Workers, drones and queens are infected. I have seen drones with

the symptoms of the disease ejected from a queenless hive, the same as diseased workers. Frequently I have had queens not more than one or two years old, disappear during the honey-flow, or at some other unexpected time. I suppose they were superseded when found too sick to do their duty.

The first spring that my bees died in considerable numbers, I thought they had been poisoned by somebody spraying his trees too soon. A year or two later I fed outside, and concluded that the shiny bees, dying around the feeders, had been daubed in the syrup, and the others had pulled their hair in trying to lick the syrup.

It is a fact that the diseased bees will hang around the feeders longer than the others, but perhaps it is because they are not strong enough to fly in the fields.

My first eye-opener on the question, was during a honey-flow. I had accidentally left some honey from burr-combs close to the hive, and when I came back I found the pretended robbers trying to get into the hive, and the burr-combs untouched.

Well, what is the disease? Cheshire says it is a bacillus much smaller than the one that produces foul brood, and of a much slower growth. It is found in the grown bees more than in the brood, and more in the queen than in the workers. Cheshire calls it *Bacillus Gaytoni*, his attention having been called to it by a Miss Gayton. Miss Gayton thought the disease was connected with the queen, and had succeeded in curing it by changing of queens.

Somebody may ask here what a bacillus is.

Bacilli are microscopic "critters" in the shape of a stick. These sticks grow rapidly under favorable circumstances, and when they reach a certain length, break into two or more pieces. These pieces grow as well as the first ones, and break also, and so on as long as there is plenty to eat, and the other circumstances are favorable.

When the feed is about to give out, the last "sticks," instead of growing and breaking, contract themselves into egg-shaped "spores." These spores are to the sticks exactly what the seeds are to the plants. They can be kept like seeds perhaps for years, under certain circumstances, without any change, and then when placed in the right conditions, develop into sticks again, and these sticks multiply like the original ones as long as they are favorably placed to do so.

Foul brood is caused by a bacillus called *Bacillus alvei*, which develops rapidly in the brood, but seemingly under difficulties in the body of the grown bees, though it is found there also. The spores are transported from one cell to another, also from one hive to another, by the bees, and even the apiarist. The disease can be prevented from spreading to the healthy hives by spraying the diseased bees with some antiseptic (phenol or salicylic acid). The operator is also to wash his hands and instruments carefully.

But these spores cannot live exposed to the air very long, some say not more than a few hours. On the other hand, they will keep their vitality almost indefinitely in honey, and when honey containing spores is fed to larval bees, the "sticks" develop at once with an astonishing rapidity.

Owing to the impossibility of reaching everywhere into the hive, and in all the honey, with antiseptics, the treatments with such have generally (not always) failed.

There is a similar disease attacking the silk-worms, but of a more slow growth, and developing itself in the moth as well as in the worm. If the attack is strong, that is, if the bacilli are numerous, the worm will succumb before spinning its cocoon, but usually dies in the cocoon. Often the silk-moth comes out of the cocoon and lays her eggs as usual. In such cases spores are found not only in the body of the silk-moth, but also in the eggs; and of course these eggs hatch diseased worms.

Generally, the spores come from the excreta of the diseased worms, or the putrefied bodies of the dead ones, and are swallowed by other worms when eating.

By what proceeds, it seems as though bee-paralysis is much more like silk-worm disease than foul brood. Like silk-worm disease, bee-paralysis develops itself gradually, and attains its full development in the grown insect. I have never seen any brood that did not look perfectly healthy, but for all that it might be diseased already—only on account of the slow development of the *Bacillus Gaytoni*, the disease would not show itself until much later.

The silk-worm disease is disastrous; bee-paralysis comparatively not. This may be due to the fact that as bees void their excrements, and also die outside of the hive (except in winter), the spores contained in their bodies are generally carried out. I do not know whether the queen transmits the disease to the brood by her eggs or not, but the fact that re-

moving the queen has often cured the disease, seems to point to that direction.

What can be done? The treatment used to cure silk-worm disease cannot be applied to bees. The chief part of it consists in a microscopical examination of the eggs to ascertain if there are any spores in them, and reject all but the healthy ones.

Two processes suggest themselves: Since the disease resides chiefly in the grown bees, it is probable that salicylic acid administered in syrup, or some other antisepic, would destroy the disease. The other consists in removing the queen to be sure she cannot transmit the disease to her brood through her eggs or otherwise; and at the same time spraying the bees and combs with some antiseptic (salicylic acid, phenol, sulphur, or perhaps salted water) in order to destroy what spores might be in the hive, and repeating the process until all the diseased bees should be gone.

The bees themselves help a good deal in checking the disease, by ejecting and literally carrying out the diseased bees; and since bees void their excrements outside, and also die generally outside of the hive, most of the spores are thus carried away. Somebody has insisted, however, that the dead bees ought to be collected and burnt, so as to avoid any danger from that source.

I have not tried anything yet.

Knoxville, Tenn., July 20.

Swarming and the Bee-Keeper.

Written for the American Bee Journal

BY S. C. MARKON.

What harvesting is to the farmer, what pay-day is to the editor, what Sunday is to the minister, swarming is to the bee-keeper. Proper swarming culminates proper management. By this, profit is made and loss sustained. Swarming, unlike wintering and seasoning, is directly controllable. Increase and surplus honey result from its method of procedure.

If I wish to double the number of colonies, is it that I must sacrifice my amount of surplus honey? No! For the reason that I may early divide the colonies, give laying and clipped queens (prepared in one or two frame nuclei to avoid swarming while mating) to the young colonies, and have them prepared for the flow of honey. If the season proves a failure, double up colonies to winter. The ways of sacrificing honey for increase are numerous, and the majority of bee-keepers have already experienced them.

Again, let us suppose a bee-keeper—amateur or professional—managing an apiary. The proper way for him to proceed would be to have his hives ready and clean, with combs free from worms. He may, however, neglect hives and combs until swarming is already upon him, then with hurry and anger he rushes from point to place, upturning last year's negligence, overturning hives of honey, bee-bread and worms, himself blinded by the cloud of moths issuing from the pile, etc. The former looks upon swarming with cheer and complacence, the other with dread; the one gladdens its coming, the other fears; the one hives with neatness and correctness, the other with slovenliness and irregularity; the one succeeds, the other fails; the one we honor and follow, the other we shun and despise.

One remarked that by the chips he could tell the workman; so by the condition of the combs we can tell the story of that bee-keeper's life. No matter if he combine any trade or profession with apiculture—the amateur bee-keeper experiments, the professional learns. The amateur becomes the professional when he combines reason with the honey-bee's instinct—when he observes, notes and studies.

Right here I may say no science affords such a field of experience and pleasure as the culture of the Italian honey-bee. No science portrays the character of a man better. We can see men who are painfully economical in the apiary, and we see them fail. Indeed, no profession so combats economy as this. This profession is comparatively new, yet one very old. Progress was never greater nor faster than to-day, and who can see its climax? There are bee-keepers who will take every ounce of honey from a colony and leave them to gather their winter stores from the last of buckwheat or the frost-bitten flowers. What is there seemingly more cruel? Such businesslike little creatures, brimming with animal life, and their wonderful God-given instinct, gathering perhaps five or six fold their own consumption!

The art of bee-keeping is holding out its hand for men who are men, according to Emerson—men fit to tutor a family of intelligent children. Apiculture is becoming a pleasure with its ample gain.

Cardiff, N. Y.

Difference in Colonies—Other Matters.

Written for the American Bee Journal

BY WM. M. BARNUM.

I wish some one would give a satisfactory explanation of the marked difference existing between different colonies of bees. If theory (fine-spun, at that) goes for anything, two queens reared from the same mother, at the same time, and under exactly similar circumstances—*ought* to produce practically similar workers. But they *don't*. There are not two colonies of equal value, in this sense, in the State—and what I want to know is, how can we recognize and alleviate this most important "discrepancy," with the least trouble.

Alley says "there are *weak* strains of bees;" and many of us have noticed that some colonies were later at work and earlier to return than others; more excitable natures among some colonies, and so on. We find, in fact, that bees differ most materially. Now, why wouldn't it be a good idea to endeavor to *breed out* the bad points, and *breed in* the good ones? A superior race of bees would surely result—and that's just what we are all looking for!

DEADMAN'S PICTURE AND APIARY.

Did you notice that picture of Deadman and his apiary in the July *Canadian Bee Journal?* It shows a model apiary, and a good-looking man. Deadman is a good writer, and we would like to hear more from him over on this side o' the line.

SHADE FOR HIVES.

The hot wave which swept over the country last month, makes the shading question pertinent and interesting. I would like to know, among other things, what will shade a hive effectually, as well as conveniently. The grape-vine does not prove at all convenient with me—too much in the way. A shade-board is liable to blow over against another hive in a heavy wind; and the fact is, I don't know so much about this subject as I used to think I did. Dr. Miller, try your hand at this conundrum!

CONFLICTING REPORTS.

Reports are conflicting this year, as usual. A recent bee-paper contained a report from Bro. Alley, of Massachusetts, who says "Bees are booming; best honey year we ever had!" Another man, from "'way down in Maine," says in the same paper, "Bees starving—must feed for winter." And so it goes.

SAYS "BEE-KEEPING PAYS."

Thies, "the man from Illinoy," makes the assertion in the last *American Bee-Keeper*, "that bee-keeping pays;" and he really ought to know. He says: "Lets stick to our bees, and do our portion of the work well, and they will pay as well as anything else." Every business has its ups and downs, and when one considers time and money invested, there are few better occupations than bee-keeping. It should be made a side-issue to some other good business, however; which will assist materially in helping out on poor honey seasons. His advice is good; whatever you do, don't give up your bees!

Denver, Colo., Aug. 1.

Making Sugar Syrup for Feeding.

Written for "Gleanings in Bee-Culture"

BY B. TAYLOR.

Feeding intelligently is, in my opinion, the key to certain success in honey-production. It now appears certain to me that it is impossible to winter bees with certainty in our Northern country, where they are confined five or six months, unless the hives are well filled with young bees when winter commences. Sometimes the usual fall flow of nectar from flowers fails; and the colonies, especially those that have made a large amount of surplus white honey, will cease to rear brood when their store of surplus is taken away, and I am now certain that such colonies cannot be wintered by any perfection of quarters or preparation, so as to come out in the spring sufficiently strong in bees to breed up strong for the white honey-flow; and without this, profitable bee-keeping, as the conditions and demands of markets now are, is impossible.

The remedy is, to feed the bees in the fall, when the flowers fail from any cause; and I know that, by expending 50 cents to $1.00 for sugar, and making it into suitable syrup, and feeding it intelligently, it will cause a colony to continue brood-rearing, and have the necessary force of young bees that can live until another season begins.

Granulated sugar is the cheapest material to make this syrup of, as a dollar will now buy about 20 pounds at retail, which will make 30 pounds of syrup—

enough to send any colony into the cellar in prime condition. This sugar syrup, however, unless skillfully made, is liable to two serious faults—fermenting and granulating, either of which is fatal to success. I had learned to avoid these difficulties, but at the cost of considerable trouble, and I hailed any simple and certain means of making the syrup as a great boon: and I know that thousands feel as I do; hence, the question is one of great importance to bee-keepers in general.

When I read Mr. Tatman's article I decided to go to town at once and get the necessary material for a machine; but no team being immediately at command, I was compelled to delay. Alice Carey says, in one of her sweet poems—

"We cannot make bargains for blisses,
Nor catch them like fishes in net;
And ofttimes the things life misses
Help more than that which we get."

Being disappointed, I lay down for a restful nap. Here is the time and place where I do my thinking and dreaming. A vision presented itself to my mind. I had one of Bro. Root's uncapping-cans. Why would not this make a capital leach for making syrup? Here is the 12-gallon can below, for holding the syrup when made, with molasses gate all ready to draw it off. The top can will hold at least 150 pounds of sugar, with room for water. But this great weight will be too much, for the wire-cloth bottom will sag and spoil it. I will go at once and plan to overcome this difficulty. Oh, happy day! Bro. Root has anticipated this very need. He has put this large tin cone in the lower can for this very purpose. I had forgotten it was there. I had often wondered why it was made, as the cappings from combs, when extracting, are very light, and do not need it. It is now plain why it is there. Bro. Root truly sees things from afar off.

Yes, the thing is all ready for a perfect syrup factory, without a cent of expense, or a moment's delay. The flannel filter is the only thing needed. The can is 20 inches in diameter, and a circle was struck on a piece of stiff paper 22 inches in diameter, 2 inches larger than the can. This is to turn up one inch all around against the edge of the can, so the sugar can be pressed tightly against it, and a leak be prevented, and the syrup be compelled to leach through the cloth, for in this lies the secret of perfect syrup.

The paper was laid upon a sound piece of clean old bed-blanket, and three pieces cut out; and as we were quite certain that we had found the "promised land," and that the thing was not an experiment, we located the can under the shop stairs, upon a neat platform high enough to get a suitable vessel under the honey-gate, to catch the syrup.

The flannels were spread upon the wire bottom, and carefully adjusted around the edge. Then 70 pounds of sugar was scooped from the barrel of granulated, sitting alongside. Two pails of water was poured on, and I lay down for a night of happy dreams.

Was I disappointed in the quality of the syrup? I should say not; and I am happy.

Thousands have these uncapping-cans, or others similar, and I need not add another word to this rather long story.

Forestville, Minn.

Bees Moving Eggs—More Proof.

Written for the American Bee Journal

BY EMERSON T. ABBOTT.

Mr. W. S. Mitchell, of Farmington, New Mexico, writes me as follows:

"I am not only satisfied that you are correct about bees moving eggs from one comb to another (page 49), but I am further convinced that they will move them from one hive to another. I once put a clean comb between two combs that were filled with brood and eggs, knowing that they had no queen, and thinking to put in a young queen by placing one or two capped queen-cells on the new comb. I neglected to put them in for several days, and when I went to fix them I found they had done the work, and had some three or four cells on each side of the comb, which I know had no eggs nor honey in it when set in the hive. I let them alone, and they went into winter quarters as good a colony as any one could wish."

Here is more testimony in the same line of that which I gave in the columns of the BEE JOURNAL not long ago. I am quite sure that bees do move eggs, and very frequently, at that; but I am not so sure that they go to other hives for eggs, as my friend Mitchell suggests.

St. Joseph, Mo., Aug. 4.

☞ "I could not do without the BEE JOURNAL unless positively compelled to do so."—Mrs. Sarah E. Dawson, of Colorado, July 24, 1894.

Sam and Mandy "Keep Bees."

Written for the American Bee Journal

BY A. B. KEEPER.

"Hello, Boss!"

"Hello, Sam!" said I, looking up from my work with the bees, to see a colored man who lived a quarter of a mile away, coming up with excitement plainly visible on his ebony features.

"Give me a bee-box, quick, Mars Frank. Me an' Mandy [his wife] done cotch a swarm ob bees!"

"That so, Sam? How did you do that?"

"Laws a massy, Mars Frank, dere's been mighty 'citing times roun' our house fer de las' 15 minits, 'n don' you furgit it! Mandy done got stung tree times on er nose. Say, Mars Frank, fer de Lawd's sake, wad you suppose Mandy's nose'll look like now? Spects she done haf to tote it in er sling for er week —haw! haw!—Whoop! Gosh, a massy—um-m-m-m!" suddenly yelled Sam, executing a fair imitation of an Indian war dance, and clapping his hand to the calf of his leg. Evidently a stray bee had been squaring accounts with him.

"What's wrong, Sam?" I inquired.

"Oh, Lordy, Mars Frank, I'se a gone nigger. Send fer Brudder Jones. Please, Mars Frank, pray a little, so's I can die easy!"

"Why, what's wrong, Sam? You're all right. It's only a bee-sting, I guess."

Sam's face immediately cleared.

"Golly, Mars Frank; nebber tink of dat. Tink a rattler bite me, Tought I wus gwine to Glory, suah, dot time. Um-m-m-m-m! but he hurts!"

"Well, Sam. I suppose you want a hive for your bees."

"Dots wat I cum after, Mars Frank."

"Well, what kind do you want?"

"Am dey two kinds?"

"Oh, yes, Sam; there's a hundred kinds, but I only keep two."

"Wat's they wuth?"

"Well, Sam, you had better look at them."

Leading the way to the honey-house, I showed Sam the hives.

"Now, Sam, this is what is called a movable-comb hive," said I, taking out one of the frames of a dovetailed hive.

"Wha' dat, Mars Frank?"

"A movable comb means one you can take out of the hive and replace at any time, and thus examine your bees."

A SOUTHERN CALIFORNIA SCENE MISSED BY "RAMBLER."

SAMBO.—"Dat's jes' my luck. 'Pears like ebery time I finds a wild honey-bees' nest, dem pesky ants jes' chase up an' down my neck like it was a race-coahse."

"Huh!" grunted Sam, rubbing his leg. "Don' tink I zamine 'em much. Done let Mandy do dat."

"Well, Sam, if you do much with your bees, you will have to examine them occasionally to see that they are all right, though you must not handle them too much."

"Um-m-m-m! dat sting hurts! Don' tink deys much danger in dat."

"Now, Sam, there is the hive complete, and here is where the bees store the honey which is for you; this lower part is where they rear the young bees, and you must not take honey from there. I will sell you the hive for $1.75, complete."

Sam surveyed the hive critically.

"How you git de bees in um?" he asked.

"What have you got them in now, Sam?"

"Dey's hangin' on er tree, 'n de ole woman's bangin' er dish-pan under 'em t' keep 'em dar. Reckon Mandy's 'bout deaf by dis time."

"Well, Sam, you set the hive where you want it to be, and spread a sheet in front of it; get a basket and brush the bees off the limb into it, and empty them on the sheet—a few at first, and as soon as these few reach the hive, dump the rest out on the sheet. They will then all crawl into the hive, and you can remove the sheet. As no honey is coming in now, you will have to feed them then."

"How dat! Mars Frank? W'at you feed 'em?"

"Take a cupful of granulated sugar, and pour enough boiling water over it to make a thin syrup. I will come down bye-and-bye and show you how to feed them. Now, you had better hurry along, or Mandy will knock a hole through her dish-pan."

"All right, Boss. Yere's de money, an' I'll be gwine. How soon you be down?"

"Oh, in a couple of hours, I guess. Be sure and do as I told you, and make that syrup when you get the bees hived, so it will be cool when I come."

"All right, Boss; much erbleeged;" and Sam disappeared down the road.

In my next I will tell you about my first visit to Sam and his wife "Mandy."

Darktown, Blackland.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

The Great Drouth in Iowa.

Written for the American Bee Journal

BY E. S. MILES.

Laugh, and the world laughs with you,
Weep, and you weep alone—

Not if you're a bee-keeper of Crawford county, for more than one will weep when they look in their surplus-honey receptacles this fall. Indeed, lamentations are now heard in the land, not only *from* bee-keepers, but *by* bee-keepers as well.

The following from the pen of Hon. J. R. Sage, of the Iowa Weather Bureau, in the *Iowa Homestead* for July 27th, describes the season, and also the reason for the above-mentioned lamentations, in a very interesting and truthful manner:

This is a peculiar season. As a matter of fact all seasons are peculiar, in that no two are exactly alike. But this season has been so far off from the ordinary run as to be unique and unprecedented in many respects. It opened earlier than usual, with most glorious promise. March came in wrong end first, beginning with ethereal mildness, and ending with zero and blizzards. Farmers plowed, sowed, planted gardens the first half of the month, and rejoiced in the belief that the zone had slipped a cog to the southward. The last of the month they shivered over fires, or went out with overcoats and mittens, and saw the opening buds of tender plants frozen solid.

April was warmer than the average, with plenty of moisture, making it an ideal month for farm work and seeding operations. May brought phenomenal extremes of temperature, the general range being from 90 degrees down to the most damaging freeze ever known in this section at that stage of crop growth. This was a discouraging set-back, but if favorable conditions had followed it would have been one of the best of seasons. But the most disastrous feature of the season thus far has been the great drouth, which is likely to become historic. Certainly it is entitled to rank as a record-breaker, for this section never experienced such a season for aridity at this time of the year. Beginning early in May, it steadily maintained its withering grasp. Though most promisingly "broken" on several occasions, yet it declined to stay broke, and resumed business at the old stand. This State has been the center of its greatest severity, but in its scope it has embraced a considerable part of the corn-belt, and stretched from the Dakotas to Georgia.

Since the above appeared, the great drouth's business has certainly not fallen off any—in this part of the State, anyway. It has been the boast of this

county that it never had a crop failure. But this year small grain will be scarcely half a crop, and corn—our main crop—will be almost a total failure except for fodder. White clover is apparently all dead, and even our native groves are showing effects of drouth. On lots of the basswood trees the leaves are turning yellow and falling off. Nearly all streams are dry, and water will soon be as scarce as the proverbial "hen's teeth."

Of course it is extra hot, too—from 98° to 108° in the shade every day. All the honey I got from 12 colonies was about 18 pounds a piece, from the two best colonies, and they had ready-built comb. Basswood yielded only two or three days, and then not very liberally. No increase, but colonies all in fair condition. No prospects for a fall crop. We shall rejoice, however, in the success of our brethren who report through the "Old Reliable," and sympathize with those who, like ourselves, report a failure, knowing that it is only of the things that perish that we are short, and that of the things that endure unto eternal life, we are furnished an unfailing abundance.

Denison, Iowa, July 30.

Yellow Jasmine—Bees in the South.

Written for the American Bee Journal

MRS. C. L. RICE.

On page 180, Dr. Brown gives an interesting treatise on the yellow jasmine. Although the information therein is not new to me, as I had occasion to read up on the subject, still I was glad to learn that he agreed with me, that we have no cause for apprehension of evil in the use of honey from our section of the country, on account of yellow jasmine, as the quantity secreted by the flowers is so small that it could not affect our surplus, coming so early, it all being used in brood-rearing, and neither stored nor sealed.

Now, if the spring disease of bees is caused by the food given at that time, we cannot entirely obviate the evil; but, if on the contrary, it is caused by conditions in the hive and surroundings, then we must find a remedy.

Admitted that the disease appears and disappears with the coming and going of the flowers, we have usually the same conditions in the hive at the same period of the year—that is, sealed honey sweating, excess of room in the brood-chamber, and little ventilation, causing cold and dampness, which, on the approach of warmer weather, are ameliorated, to a certain extent, while the quantity of brood and bees reared from the product of the fields, occupy the empty space; increase the warmth and ventilation, health is restored, and all goes merrily on to the harvest time, which opens in April. Such is the case with us.

What do the bees subsist on during the stress of dry weather? What do they do with the pollen stored? Remember, I am seeking knowledge for the benefit of bee-keepers in the South. Last spring our bees were almost entirely without stores. We began feeding about the middle of February, yet there were several colonies affected precisely as Dr. Brown describes, and they were the ones that had several frames of sealed honey and extra room in the brood-chamber.

We of the South have many lessons to learn before we can say, "We know it all;" and excuse me if I cross swords with you, Doctor, in the statement of facts.

Ramsey, La.

Reports from Members of Ill. B.-K. A.

Written for the American Bee Journal

BY JAS. A. STONE.

The following is the July reports of prospects for honey, from the members of the Illinois State Bee-Keepers' Association. The questions are answered to correspond in number thus:

1st. How many colonies have you?

2nd. What are the prospects for a honey crop?

3rd. How much honey gathered to date?

4th. Is the honey gathered No. 1 or not?

Thos. B. Allen, Stirrup Grove, Macoupin Co.—1. 31. 2. Poorest I ever knew. 3. Not any; have not even put on sections.

A. B. Anthony, Coleta, Whiteside Co.—1. 27. 2. No more for this unusually dry season. 3. 200 lbs. comb, 100 lbs. extracted. 4. Basswood, and No. 1 for the kind.

F. X. Arnold, Deer Plain, Calhoun Co.—1. 95. 2. Very poor. 3. About 1,100 lbs. 4. No. 1 of its kind (honey-dew).

C. M. Beall, Clayton, Adams Co.—1. 8. 2. Some buckwheat sown, from which they will probably get enough honey to winter on. 3. None. I put on no supers, as the

white clover was all killed, and there is no basswood in this vicinity.

M. Bevier, Bradford, Stark Co.—1. 40. 2. Poor. 3. None.

S. N. Black, Clayton, Adams Co.—1. 35. 2. No honey. 3. None.

Peter Blunier, Roanoke, Woodford Co.—1. 51 in spring—5 swarms—total 56. 2. Very poor. 3. About 200 lbs. so far. 4. Good quality.

D. A. Cadwallader, Prairie du Rocher, Randolph Co.—1. 18, spring count; 27 now. 2. Medium. 3. 500 lbs. extracted. 4. Yes, clover and basswood, principally.

G. W. Cole, Canton, Fulton Co.—1. 24. 2. Very poor. 3. About 60 lbs. 4. No. 1. I saved one swarm; two went on a strike.

C. Covell, Buda, Bureau Co.—1. 35, and have the care of others. 2. Not good, very dry, and little prospects of fall bloom. 3. Not any—on the average enough for winter stores. 4. Basswood.

Dadant & Son, Hamilton, Hancock Co.—1. 350. 2. None. 3. None. 4. Will have to feed for winter.

Peter Dale, Granville, Putnam Co.—1. 135. 2. Very slim. 3. About 50 lbs. 4. Yes.

P. J. England, Fancy Prairie, Menard Co.—1. 26. 2. Poor. 3. 25 lbs. extracted. 4. No. 1.

J. D. Everett, Oak Park, Cook Co.—1. 34. 2. Fair. 3. 158 lbs. 4. No.

E. T. Flanagan, Belleville, St. Clair Co.—1. 250. 2. Poor. 3. None.

J. M. Hambaugh, Spring, Brown Co.—1. 130. 2. Exceedingly slim. 3. 2,500 lbs. 4. ½ dark, ½ better, but not No. 1.

Bernard W. Hayck, Quincy, Adams Co.—1. 25. 2. Not good. So far not enough to winter my bees on. 4. Not No. 1.

Leroy Highbarger, Leaf River, Ogle Co.—1. 80. 2. Very poor. The worst drouth ever known—pastures all burnt up. 3. 100 lbs. clover, basswood and honey-dew. Bees are doing nothing now. 4. Clover and linden; I think, No. 1.

Wm. Little, Marissa, St. Clair Co.—1. 60. 2. For fall crops fair if rains fall 3. My crop ruined by honey-dew. 4. Not good for anything but bee-feed.

Dr. C. C. Miller, Marengo, McHenry Co.—1. 202. 2. "Nil." 3. Nary a drop.

Adam Phelps, Springfield—1. 28. 2. Poor. 3. Not a drop. Bees on a strike these good old Democratic times.

Geo. Poindexter, Kenney, DeWitt Co.—1. 90. 2. Very poor. 3. 50 lbs. 4. No. 1.

Jas. Poindexter, Bloomington—1. 150, and 30 nuclei. 2. Think I will get the bees summered safely. 3. No surplus. 4. Basswood mostly.

Geo. F. Robbins, Mechanicsburg, Sangamon Co.—1. 79. 2. None so far; can't tell about the fall harvest. 3. No surplus to date, only enough to fill empty brood-nest. 4. No, chiefly honey-dew.

J. Q. Smith, Lincoln, Logan Co.—1. 62. 2. Poor. 3. 200 lbs., Alsike clover. 4. No. 1.

F. A. Snell, Millegeville, Carroll Co.—1. 112. 2. Not very flattering. 3. About 600 lbs. 4. No. 1.

P. E. Vandenburg, Jerseyville, Jersey Co.—1. 38. 2. Poor—no surplus. 3. Not any surplus. 4. Don't know.

W. M. Van Meter, Era, Cook Co., Texas.—1. 8. 2. Not good on account of drouth. 3. About 100 lbs. 4. Very good.

F. C. Vibert, Hockanum, Conn.—1. 7. 2. Very poor—the severest drouth ever known is the cause. 3. 24 sections from two colonies, taken July 1st. 4. No. 1, as fine as I ever saw.

E. Whittlesey, Pecatonica, Winnebago Co.—1. 71. 2. Very poor. 3. None in sections. 4. No white honey—clover, linden, and honey-dew mixed. No No. 1 in this section of country. JAS. A. STONE, *Sec.*

Bradfordton, Ill.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Comb Honey Three Years Old.

In June we used on our table comb honey three years old, and it had not granulated in the least. We had four sections of it. I kept it in a small sample case, on one corner of the mantle-piece in the family room. We keep honey from one season to the other without its granulating—keep it on top of the safe in the cook-room. Well-ripened comb honey can be kept in this climate any length of time, if kept in a warm, dry room. J. D. GIVENS.

Lisbon, Tex., Aug. 11.

Stinging Horses—Honey-Laden Bees.

That item on page 141, about bees stinging horses to death, needs thinking about. Yes, it is quite apparent that the bees had been "robbed"—probably the combs were exposed to robbers; bees rudely brushed off with a wisp broom, honey dripped around the apiary, and everything done that well could be, to raise the fighting disposition to the war pitch. Had bee-escapes and gentle

methods been used, this could never have happened.

But that Crawford county bee-keeper's explanation won't go down with me. No, sir! honey-laden bees returning to their hives will not attack animals, no matter how hard the wind blows, or how low they fly. As well might one claim that it was the honest, industrious, sober workingmen, who were busy at work in the shops, who did the burning, looting, beating and killing during the late strike!

Bee-keepers cannot be too careful how they handle their bees during a drouth, and dearth of honey. Once get an apiary on the rampage, stinging persons and animals, and it is no easy matter to get them quieted down again. Like the strike, such condition is much easier to avert than to cure after it has once broken out. C. H. DIBBERN.

Milan, Ill.

A Terrible Fall.

On July 3, 1893, while trying to get a swarm of bees out of a tree, the limbs broke, throwing me on my back, and I fell 20 feet, alighting on my right shoulder, putting it out of place, and nearly breaking my neck. It put me to bed for nearly 3 months, permanently crippling me for life. I am still under the doctor's care, with a stiff neck. But I am now up and around with only 10 colonies out of 70 when I fell.

HIRAM J. WARD.

Farmington, Kans., Aug. 1.

Newsy Letter from Susie.

I guess you think I have forgotten you, but I was busy going to school, and saw Charlie Sanford's letter in the BEE JOURNAL, of August 2nd. It set me to thinking that I had better write, too, to let him know that at least one girl is interested in bees. Papa thinks he is a great bee-man, but I can't blame him, for I do like to hear about bees. I am a little afraid of them.

I have three brothers that farm 80 acres of corn and 60 acres of oats, and papa takes care of his bees. My oldest brother, Charlie, is 18, and graduated from the Lanark high school last spring. Robbie is aged 17, and John is 15. I have a baby brother just three weeks old, which mamma thinks she will call Atchley, because papa talks so much about Jennie Atchley! Well, this is all of our family. I have no sister.

We have 7 new colonies of bees. The season has been very dry, and not very good for bees, but papa has taken off 175 pounds of honey, and expects to take off as much more in a few days. So he thinks he is doing well for this year.

I hope to hear from more boys and girls. SUSIE WEED.

Lanark, Ill., Aug. 7.

Bee-Sting Remedies.

1st. Salt and baking powder, or saleratus, equal parts, dissolved in water, a strong solution. This remedy is simple but effective, and all bee-keepers probably have it on hand at all times.

2nd. Two or three folds of flannel dipped in hot lard, and bound on the part stung, will immediately relieve the pain, and stop the swelling occasioned by the sting.

3rd. The common onion, if applied to the wound, will immediately relieve the pain, if changed every few minutes.

4th. If the foregoing remedies should not be at hand, make a thin mortar of clay-earth and apply.

Now these remedies are simple, but effective. I should be pleased to have bee-keepers, upon trying them, report in the BEE JOURNAL. N. C. FEAKINS.

New Richmond, Wis.

Very Dry—Basswood Honey, Etc.

The honey season for this section of country seems apparently closed, unless we have sufficient rain soon to start up vegetation anew. Not having had any rain since two months ago, everything in the line of honey-producing plants is dried up. The pastures and meadows are as if scorched by fire. The forest trees begin to wither and dry up, for we have not even dew during the night.

Our bees are carrying in some pollen during the morning hours, but no honey, for robbing, wherever there is a chance, seems to be in order.

I have lived in this section of country for over 30 years, and I never saw a season so dry as this. The honey harvest is a total failure here, except in localities where basswood is in abundance. Those bee-keepers whose bees had access to basswood, realized a fair crop of good white honey; but where contrariwise—those whose bees were not in reach of basswood—will have to feed for winter.

It is a good plan for bee-keepers to not wholly depend upon nectar sweets for their living, for a little side-business

always comes in good—such as farming; small-fruit growing or poultry-raising. If one fails, all don't fail. Small grain crops have been comparatively good, but fruit of all kinds proved a failure.

STEPHEN ROESE.

Maiden Rock, Wis., Aug. 7.

Light Honey Crop.

In this part of Ohio some won't get a pound of surplus honey, nor a swarm. The best of us will get about ¼ of a crop. I had 21 colonies in the spring, and have had 9 swarms; also about 250 pounds of honey. But I am going to take the BEE JOURNAL another year.

Ridgeway, Ohio. MILTON LIMES.

Destroyed by the Drouth.

Our crops are, or will be, if we don't get rain very soon, a total failure. We have had a very severe drouth here, extending over a large area of land. Many people will suffer therefrom. Our bees would have done well this year if the dry spell had not lasted so long. My husband is a regular bee-lover.

MRS. J. P. SIMMONS.

Forest Lake, Minn., July 26.

P. S.—August 8th, and no rain yet. Our crops are lost.

Best Honey-Flow in 16 Years.

We are having the best honey-flow that we have had for 16 years, or since I have owned bees. White clover came first, then honey-dew. I find that the young acorns are blasted or injured by insects, and a thick, sweet substance drops out, covering leaves and falling on the ground like great drops of rain. I have secured about 50 pounds per colony, of very nice honey, some of it dark but mild flavored. A few colonies have stored 90 pounds each. I have it tiered up on the hives yet, as there is not much market for section honey here—they like chunk honey best. A party offered to take 60 pounds if I would cut it out and keep "them little boxes," and let him have it for 2½ cents less on the pound.

Brimstone is used here to a considerable extent—no bee-literature wanted. One of my neighbors owned a colony (or gum) of bees that he claimed was so very cross that he could do nothing with them, so he piled straw (not "stray straws") around them, set fire to it, and got off a safe distance and threw rocks at it. Result—loss of both bees and honey. I was offered $2.00 to go six miles and take honey from one "gum" that no one so far had been able to rob. I did not have the time. I suppose it will meet with the same fate as the one mentioned above.

This is a land that flows with "blue milk and chunk honey."

Logan, Mo., Aug. 7. G. W. LOGAN.

Another Bee-Boy Heard From.

The Editor's answer to Chas. W. Sanford gives me the liberty to write. I am am an orphan boy, 14 years old. My grandma and I live together. We have kept a few bees in box-hives for the last 5 years, but since Mrs. Jennie Atchley moved to Bee county we have put them into frame hives.

West Texas is a paradise for bees. The wild currant begins to bloom the last of January and then continues to bloom until about the middle of March, and by that time there are plenty of other blooms for the bees to work on.

Will some of the bee-keepers let me know where I can get some catnip seed?

WARREN W. DOWNING.

Pettus City, Tex., Aug. 6.

Making Foundation Moulds.

Make a frame like a double slate frame with hinges, cut a piece of comb foundation the size of the frame, turn one frame bottom upward, with the comb foundation inside, lying flat on a table or bench; then make a little mortar of plaster of paris thin, rub on the comb foundation all over it, then fill the frame full of the mortar thick. When the mortar is well set, turn the frame over, shut tight together, and fill the other frame the same way. Make a back for each side, of some thin wood, and fasten to the back of each frame, then pry apart, peal off the comb foundation, and you have it.

Melt wax and use a dipping-board to get thin sheets of wax. Wet the machine and put the sheet of wax in as warm as you can handle it, and press the frames together, and you have an exact copy of the comb foundation you used in making the machine. I made one of the moulds but seldom use it.

There is scarcely any expense, and but little time in making one, and time put in using it is much better than spent in a saloon, though I hope very few if any bee-keepers ever patronize saloons.

We are suffering from a severe drouth.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

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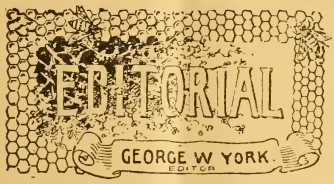
VOL. XXXIV. CHICAGO, ILL., AUG. 30, 1894. NO. 9.



North American Date Changed—The Executive Committee have decided upon the following:

In order to let all bee-keepers who can, take advantage of the "Harvest Excursion" rates which will be given on October 9th, we have concluded to change the date of the meeting of the North American Bee-Keepers' Association to **October 10th, 11th and 12th.** The rate will be ⅓ fare plus $2.00. These rates apply EAST of the Missouri River only. Ask your railroad agent about them.

Special rates of 1⅓ fare will no doubt be secured in the territory covered by the Western Passenger Association. These will be announced later, if secured.

EMERSON T. ABBOTT, *Pres.*

St. Joseph, Mo., Aug. 25, 1894.

☞ Agricultural papers will please call attention to the change of date.

The Fathers have this week something good to read in the department called "Our Doctor's Hints," on page 267. Be sure to read it, and heed it, fathers, for it will pay you. Dr. Peiro is a man of extended experience, and knows what he is talking about whenever he says anything in his department. We wish that his hints to mothers last week, and to fathers this week, could be read by all the parents in the land. It would no doubt be a grand, good thing.

Prof. Cook informs us that it will be impossible for him to be at the St. Joseph meeting of the North American, in October. It comes during term time at the Pomona College, and the Professor says he cannot then get away. That's just as we expected, when we heard he was going to reside permanently in California! We fear his Eastern friends will never see him again, unless they should some time go to Claremont.

It seems to us that the California State Bee-Keepers' Association might select him as a delegate, furnish the financial means to go, and then *order* him to attend the North American meeting. As Prof. Cook is the President of their association, we'll bet a "Cook-y" he'd find some way to leave his college work for two weeks! Why not do it, Californians? It would help your State greatly.

☞ Whatever requires doing about the apiary, should be done at once. If left for another day, an important matter is liable to be forgotten when many other things require attention, and considerable loss ensues.—*Simmins.*

Bro. Ernest R. Root, as we mentioned last week, reached our office on Wednesday, Aug. 22nd. He had been on a bicycle trip mainly for his health, through southern Michigan and northern Illinois. On account of the hard wheeling in the Michigan sand, he had been delayed—so much so that he could stop at the BEE JOURNAL office only a few hours. This we regretted very much, as we had counted on having a longer visit with our brother editor. But you may believe we improved

every minute of the time in an E(a)rnest way, and were very pleased to have the opportunity to get better acquainted with the popular associate editor of America's illustrated bee-paper—*Gleanings in Bee-Culture.*

We had met Bro. Root only once before—at the Columbian meeting of the North American last fall—but from the time we first became editor of the BEE JOURNAL—over two years ago—we have had the feeling that in him we indeed had a true friend and brother. That "feeling" is well-founded, especially as Bro. Root and the writer are so nearly the same age—only 4 months difference. Bro. Root, before arriving here, had been to see Dr. Mason, M. H. Hunt, Hon. R. L. Taylor, W. Z. Hutchinson, and others. From here he went to see Dr. Miller, and after that he expected to go direct to his home in Medina, O. In all, he would be away about two weeks, and hoped to have fully recuperated tired energies, and be ready to take up his work again with renewed powers. Doubtless the readers of *Gleanings* will soon be favored with a full report of his wanderings.

Well Pleased.—Rev. Wm. F. Clarke, of Guelph, Ont., writing us on Aug. 17th, said:

FRIEND YORK:—I want to say while I am writing, that I am well pleased with your conduct of the AMERICAN BEE JOURNAL. Take it for all in all, it still heads the procession of bee-journals. Of course it is not perfect, but it is good, very good.

I like Dr. Peiro's articles. Your paper will be worth all it costs, and far more, for that new departure, which ought to bring you lots of subscribers. I have often thought what a pity it is doctors do not tell people how to avoid disease. Dr. Miller's paragraph on page 210 is apropos.

Yours truly, WM. F. CLARKE.

Honey for Sick Canaries is recommended in the following, which Dr. Peiro translated for us from a French bee-paper:

The *Revue Internationale D'Apiculteur* copies from a Spanish bee-paper as follows: The cold, wet weather occasions a sickness to canaries that begins by loss of glossiness of the plumage, and a drowsiness of movement. Their voice becomes rasping and unpleasant, and finally a complete loss. A little honey is warmed and droped on a piece of bread, and fed to the sick bird for several days. It is said to restore its voice and vigor.

Many Bee-Keepers are Sunday-school men, and Dr. Miller is one of them. A township Sunday-school convention was recently held at Marengo, Ill. (the Doctor's home), and here is what the Marengo *Republican* said about one of the parts taken by Dr. M.:

The Question-Box, conducted by Dr. Miller, was a source of much interest, and elicited close attention. The Doctor has a remarkable tact of "getting on" these questions, many of them knotty and hard, but he has a solution ready and to the point in every case. This formed a most interesting part of the programme, and rounded out the success of the convention in fine form.

Yes, Dr. Miller is quite at home at conventions, and everybody hopes to see him at St. Joseph, in October. Why not put him at the "Question-Box" at that time? He's good at answering questions, for when he doesn't know the answer, he simply says—"I don't—" well, all *know* the rest of his "answer."

Mr. Lewis M. Smith, Canandaigua, N. Y., was recently visited by a representative of the local newspaper at that place, who "wrote up" his experiences and published them. Mrs. Smith, in the absence of Mr. S., furnished the visitor with much interesting information about bees. It is always a good idea to encourage such callers, and thus help to advertise and get the public better acquainted with the products of the apiary.

Popular Talks on Law have been given in each number of the *Progressive Bee-Keeper* lately. They are very interesting, indeed, and no doubt will help many folks to keep out of trouble. "Observer" is another of the *Progressive's* entertaining *nom-de-plumistic* writers, and had this to say in the August number:

The AMERICAN BEE JOURNAL is giving us a medical department; the *Progressive* is turning its attention to the law; while *Gleanings* supplies the gospel. Surely, we "bee-folks" ought to be well posted.

Yes, bee-keepers that are well doctored, and enjoying their lawful rights while being safely directed on their way to Heaven, ought not only be "well posted," but also happy, if any people can be Medicine—Law—Gospel. What more can be desired?

Honey Ruined by Moths.—One morning last week we received the following note from one of the largest dealers in honey in Chicago:

GEORGE W. YORK, ESQ.—
Dear Sir:—If you will call before noon to-day, we can furnish you with an item of interest. Yours truly,
HONEY-DEALER.

We omit the real name signed to the above, as well as the signature of this letter, which accompanied a shipment of honey to the dealer referred to:

WISCONSIN, Aug. 17, 1894.
Dear Sir:—We ship to-day over 100 cases of comb honey, mostly white clover. There is a little dark honey with it. The *face* will tell you. It is put up as well as we know how. Trusting you will get all it is worth, we are, Yours truly,
HONEY-BEES.

Having called at Mr. Honey-Dealer's office, he took us to the rear of the warehouse, and directed his experienced employe to open a few of the crates sent in by "Honey-Bees." He did so, and in the center of nearly every 12-section crate of otherwise nice looking honey, were several sections totally destroyed by the moths. Between the sections the moth-nests, as well as the full-grown and larval moths, could be seen. What an unsightly thing it was—to see the beautiful sections of honey so completely demolished.

Of course, all the dealer could do, was to write the shippers about the condition the honey was received in, and hold it subject to their order. It was useless to try to sell it without first re-crating, and throwing out the filthy-looking and moth-destroyed sections.

It seems to us that a good lesson should be learned from the foregoing account. *Be sure* that your honey is in good condition when it leaves your hands. Don't crate it until ready to ship. Keep the moths out of it by sulphur fumigation, the details of which have so often been described in these columns, and which may be found in all the best bee-books.

What shall it profit a bee-keeper, if he does gain a good crop of doney, and then lets the moths destroy it? Why work hard to produce it, and by carelessness afterward permit it to be ruined and lost?

We notice that the producers in question, are not readers of the BEE JOURNAL, and perhaps do not take any other bee-paper. You see, they will now lose perhaps fifty to one hundred dollars, when in all probability had they been readers of the bee-papers, such loss would have been avoided. In other words, it *pays* to be *posted* in any business in order to make a success of it.

The Illinois State Fair will be held at Springfield on Sept. 24th to 29th. The apiarian department is represented by the following liberal Premium List:

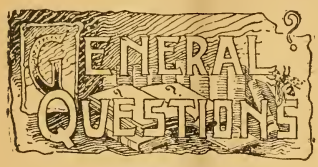
BEES AND HONEY.

	1st.	2nd.
Display of comb honey	$10 00	$5 00
Case comb honey, 12 to 24 lbs.	5 00	3 00
Display of extracted honey	10 00	5 00
Display of samples of extracted honey	3 00	2 00
Display of candied honey	5 00	3 00
Display of beeswax	5 00	3 00
Nucleus of Italian bees in observatory hive	5 00	3 00
Display of apiarian implements and devices not otherwise provided for	5 00	3 00
Display of queen-bees in cages.	5 00	3 00
Honey extractor in operation	10 00	5 00
Wax extractor	2 00	1 00
Comb foundation machine in operation	3 00	2 00
Honey-vinegar, one gallon	2 00	1 00

We wish to urge upon bee-keepers of this State the importance of making an *extra effort* this year, as the honey crop is short, and those who have *any at all* should make it known to the Secretary of the Illinois State Bee-Keepers' Association—Jas. A. Stone, Bradfordton, Ill.—or to some of the State Fair officials, so that arrangements can be made to have our interests properly represented. As the time is short, let there be prompt action in the matter.

Bro. Jas. A. Stone, the active Secretary of the Illinois State Bee-Keepers' Association, has been annoyed greatly by chicken thieves lately. He succeeded in landing two of them in jail, but one escaped. Bro. Stone's bright son attached wires from the hen-house door to an electric bell in his bed-room, and in that way "cotched" the rogues. Now if a few of them could only be "electrocuted," it would somewhat lessen the supply of chicken thieves, and also make the chicken business more profitable for honest people.

Turpentine applied to ant-hills is recommended as being efficient in inducing the ants to "move on."



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

To Prevent Crystallizing of Syrup.

Will you please give a method whereby I can make sugar syrup with granulated sugar that won't crystallize? I have tried time and again, but it would always crystallize. The last time I put two teaspoonfuls of cream of tartar in three gallons of syrup, and that crystallized also. I see by your book, "A Year Among the Bees," that you use cream of tartar, but do not say how much per gallon. L. S.

Aurora, Ill.

ANSWER.—If you will turn to page 83 of the book mentioned, you will find, "An even teaspoonful of tartaric acid for every 20 pounds of sugar is stirred into the syrup about the time the sugar is dissolved." As I use tartaric acid, it would take a good deal more cream of tartar. I think this syrup will granulate if it stands long enough out of the hive, but I've never been troubled to amount to anything after the bees put it in the combs.

A. I. Root insists that no acid is needed, and he succeeds without it. On the other hand, Mr. Burrell reported that his syrup became solid in the combs in spite of his using acid. I don't know what makes the difference unless it be the sugar. Perhaps slower feeding might make a little difference, although I've generally fed as fast as the bees would take it.

A Queen Question—Drones.

1. What became of my queen? I went to look in the hive and found queen-cells with larvæ (or queens) 4 to 6 days old, showing the queens had been started 3 or 4 days. I also found worker-eggs 1 to 3 days old, showing the queen laid the worker-eggs after the bees had started the queen-cells. The queen was a very fine, large, dark yellow 5-bander, and very prolific, so I could not see why she should be superseded; that is, if she was. I bought her in May as an untested queen. Her workers were very good and well marked, so it is a conundrum to me what became of her. She was clipped, on one wing.

2. If we allow only worker-comb in a hive, what will the bees do for drones—will they be satisfied with no drones, or will the queen lay drone-eggs in worker-cells? and would such drones be good to mate queens?

My crop is 2,250 pounds of comb honey, from 38 colonies, spring count, increased to 76 colonies. G. D. L.

Tacoma, Wash., Aug. 7.

ANSWERS.—1. You don't give any date. If it was at the proper season for it, there is nothing in the circumstances against the belief that the bees swarmed and returned, the clipped queen being lost. She may have been superseded, for sometimes a queen fails all at once and the bees seem to have an instinctive knowledge of it.

2. They'll do pretty much without, building a few drone-cells in any space that is unfilled. No drones will be reared in worker-cells if the queen is all right.

Feeding Bees—Building Comb.

1. When bees swarm late, and are rather weak, what time is the best to feed them, that they may have plenty to winter on? and how?

2. Is it a good idea to feed in the spring to make them swarm early?

3. Do they make comb through "dog days"—that is, in August and part of September? G. S.

Tigart's Valley, N. Y.

ANSWERS.—1. That depends upon circumstances. In some places there is a good fall flow and no feeding is needed. In other places there is nothing to be had after the middle of August. If they are to be fed, I should prefer feeding just as soon as I felt it was settled that they wouldn't get enough themselves for winter. This year I commenced feeding some of mine before the middle of August.

As to the how, there are a good many

ways. The best way is to take full frames of honey from other hives that can spare them, and give to the needy colonies. Very likely you haven't such combs. Then you can feed sugar syrup in any of the ways given in the books.

If you have the time for it, you can set the syrup at the entrance on a warm evening after the bees have stopped flying, and take it away before they commence flying in the morning, if any is left. It will probably be more satisfactory to use a good top feeder, like the Miller feeder, which will allow you to pour in the feed at the top without the danger of any bees being in the way. This will hold 25 pounds of syrup, and you can give them enough to do at one dose.

2. It is certainly a good plan to feed in spring if they are at all short of stores, but if they are well stocked I am not so sure you will gain anything by feeding.

3. They'll make comb any time when they are gathering, and lack comb room.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Oct. 4.—Utah, at Salt Lake City, Utah.
Jno. C. Swaner, Sec., Salt Lake City, Utah.

Oct. 10-12.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.

Sept. 11-13.—Nebraska State, at Lincoln.
L. D. Stilson, Sec., York, Nebr.

Sept. 15.—S. E. Kansas, at Bronson, Kan.
J. C. Balch, Sec., Bronson, Kans.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

The Father and Son.

My dear old boy, you'll not take it amiss if I call your attention to a subject nearest your heart, and very close to mine, will you? But you haven't forgotten that we were boys, together, many years ago, and now we are old "daddies" we should not overlook the great need of our boys' best interest. How natural we should think them almost perfect, in health and wisdom, hence requiring nothing. Dear Charlie, that is the great mistake most fathers make! Now let us just consider the *facts*—'twixt you and me.

I need not remind you of our antics when *we* were boys? From mere toadlings, what an amount of spirit, fun, and trouble, too, we've had, eh? You'll admit that frequent loving counsel from our fathers would have been a good thing—a very blessing—in our after years! But, no; our fathers were always preoccupied—too busy with crops, money and study—the curse of the present day! If only they had studied their *boys* more! Their individual trend; their special tendencies, their natural adaptation; their besetting inclination, whether for good or error! Ah, yes, our fathers *meant* well, but what is said of good intentions? That "hell is *paved*" with them!

It is *not* enough, my dear old friend, that we be blessed with boys; there comes a fearful responsibility with their gift, and we may not overlook it, dear Charlie; we must render an account of *their* stewardship as well as our own! Not enough that they be fed, that they be clothed, but their minds and hearts must be directed in the better way. This is best done *singly*, remember *that*. As each have special gifts, individual desires, and personal inclinations, so must we study each his peculiar bent.

Your Fred is as unlike Charlie as George is unlike the boy you named after me—(you old blessed!)—Frank. Each have a heart full of longings, of aspirations—and *all* have their sainted mother's love! God be very near and dear to each one! Those noble boys remind me of vessels, trim and beautiful, launched on the sea of life. They

need—O *so* much—a *pilot!* What better fitted helmsman on their earthly voyage than he of strong arms and big heart—their father? The duty is awarded to you, which should be more precious than any other worldly preferment—and I know it *is*, dear Charlie!

Then see to it, jealously, that your words of encouragement be *frequent*, the more often, the less need for reproof. Make each feel the love you bear them; let your advice be to them *individually*, not collectively. Be not ashamed to affectionately caress your boys—but do it *singly*, else they will feel "girlish," and evade you. It is then your words, made eloquent by your tender love, will sink deep into each of their hearts, an enduring sentiment for life to come. Placed in this attitude you are easily enabled to direct them against every besetting sin.

It is in these silent moments of personal communion that you can point out the physical and moral danger that lies in the reading of certain books, in their hiding in lonely places, in their late rising and late retiring, in promiscuous companionship with boys who may not be physically and morally clean. Show them the best way to keep out of temptation. Keep them always *near* you. To this end you must make your home—*their* home—even more attractive than now. Let your "living room" be large; hang chaste and beautiful pictures on the walls; have enough book-shelves made, and keep them full of good, instructive books and magazines; let there be games that your boys may play, and call in their mates to the enjoyment. Make of yourself one of the most active in their pleasure. Remember a boy's longing for *refreshments*, and make a point to have something for each; apples, cookies, even bread and jam are relished, but be certain to supply *something*, if only a few gingersnaps or crackers. The old adage regarding men is equally applicable to boys—you often reach their hearts through their stomachs! At a reasonable hour dismiss the assembly with your heart's blessings, that they may retire for the rest they need, and greet them with a cheery "Good morning, children;" no matter how large they may have grown—they are always our "children."

You will all the more attach them to their home if you will allot to each the pleasure of flowers here, fruit-trees there, an arbor over yonder, each his very own, to plant and to care for. Encourage their generous regard for the beasts of your field, by giving Charlie the colt, Fred the young calf to raise; Frank prefers a shepherd dog, and George would like that lamb—to do for as they wish.

Let nothing occur to break faith with those boys—a broken promise forever relagates you beyond their confidence and your influence over them! Farsighted Jesuits have said, "Let me have your boy until the age of seven, and you can have him for life afterward;"—implying that they could inculcate deep-rooted principles in those young years that no subsequent training could eradicate, and they are correct. Be you equally wise, dear Charlie, in so forming and moulding their young minds that they may avoid evil, and bless their father for the precepts and examples that directed them aright.

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

Profitable Bee-Keeping, by Mrs. Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of this number of the BEE JOURNAL for desoription and prices.

☞ "The BEE JOURNAL is a necessity, I think, to a practical bee-keeper, and very interesting to any one, as I can cheerfully testify."—A. M. Creel, of Missouri, May 1, 1894.

CONDUCTED BY
MRS. JENNIE ATCHLEY,
BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 9.

(Continued from page 207.)

GENERAL WORK IN THE APIARY.

We will take up in this lesson some items of general work, and try to ascertain how to do certain things.

SIGNS OF QUEENLESSNESS.

We will first tell how to know a colony is queenless when there is a large colony, and we have not time to search very long. If the hive has been queenless some time, or beyond the period where it cannot rear a queen—I mean by this a colony that has no brood or eggs—they become discouraged, and if we watch closely we can tell on opening the hive, as they will be scattered all over the combs, and no general work going on. Then, as soon as the hive is opened, it seems that every bee sets up a mourn, a slow buzz of the wings, making a low humming sound. This is almost a sure sign that they are queenless, and I can tell almost without an exception when a colony is queenless when I first open the hive.

Then we have another queenless sign, when the queen has been out but a short while. The bees will come out and crawl up the front of the hives, and fly away a short distance and return to the hive, and begin a call as it seems, calling for the queen, and to show her where home is. This the bees will do sometimes constantly for a week, after they find their queen is not with them.

I had better here mention the few exceptions to this, as some bees never mourn for their queen at all, and show no queenless signs outside of the hives, and really I have met a few cases where the bees never would start a queen-cell or mourn after their queen was taken out, and bees are always poor cell-builders that do not mourn for their queen.

Of course you all are to understand that queen-cells are nearly always a sure sign of queenlessness, but not always. At swarming time, and when bees have an old queen that they wish to supersede, they will start queen-cells with a queen present, but when we have a knowledge that a hive had a young, prolific queen, and no swarming is expected, then queen-cells are a sure sign of their being queenless. But when we open a hive, and the bees are all centered together, or in a compact shape, and the combs looking clean and the bees quiet, etc., then we may be pretty sure they have some kind of a queen.

GETTING STRAIGHT COMBS.

Now, should you be short of foundation at swarming time, or at any time when the bees are building combs, and you wish straight combs, see that the first two or theee combs are started straight, and then keep an empty frame between two of the combs started, and have the hives level from side to side, and you will get nice, straight combs.

HIVING NATURAL SWARMS.

In hiving natural swarms, or any other swarms where you wish to have the bees go in at the entrance, always put a few bees in at the top, close the cover, and as soon as they begin to call, or buzz their wings at the entrance, then you can jar or smoke the whole swarm into the air, and they will enter the hive, if you will keep a smoke at the place where they were clustered, for a few minutes. The main thing in hiving bees this way, is to get a "call" at the entrance, and they will then hive themselves.

TO PREVENT ABSCONDING.

To keep bees from absconding when they have been hived, give them a frame of unsealed brood and eggs—not sealed brood. This is the best remedy I ever saw, and *never* in all my life have I had a swarm to abscond when I gave a frame of unsealed brood, honey and eggs.

I gave this plan to a beginner about ten years ago; he had been losing swarms, and he gave frames of sealed brood and sealed queen-cells, and their swarming fever was high, and they would come out every day and settle on a limb. He came over and said my remedy was no good—they came out

just the same. When he told me his bees settled on a bush near by each time, I suspected something wrong, as bees coming out of a hive and absconding after they have been hived usually go right off without settling, the same as if they had started off a limb; and some swarms have been reported going right off to the woods from the parent colony, but this I never saw, and it may be these parties were mistaken, and it was swarms that had been hived in new hives that came out and went right off.

Well, back to our frame of brood keeping swarms content. I went over to the neighbor's and found that he had not only given frames of sealed brood, but with sealed queen-cells as well, and the bees came out as any natural swarm, leaving enough bees to care for the brood, and did not all go. So I changed things, and gave frames of unsealed brood and no queen-cells, and there was no more swarming out.

There may be instances where bees will come out and leave unsealed brood, and also bees may occasionally come out of the parent hive and go straight for parts unknown, when there is nothing for them to alight upon, but I have *never* seen them do either.

HOW TO CONTROL THE BEES.

The main thing for a beginner to do if he or she wishes to make a success of handling bees, is to smoke a few puffs right in at the entrance, before the hive, or anything about the hive, is touched. This will give you complete control of the bees, no difference how bad they may be to sting—Cyprians not excepted.

I have known lots of beginners to throw down everything in disgust and quit bees entirely, just by going to the hives and prying the cover up the first thing; the bees of course covered the operator, and the air filled with mad bees; when, if the bees had been smoked at the entrance first, all would have been well.

The next lesson will be Honey-Plants and Honey-Yielding Trees that we get our surplus from.

JENNIE ATCHLEY.

(To be continued.)

"Foul Brood: Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

When and How to Feed for Winter.

Query 938.—White clover, about the only source of surplus here, is a dead failure this year, my hives are nearly empty of stores, and I expect to feed for winter.

1. When should I feed?

2. How fast should I feed? as fast as the bees will take it, or how?—Illinois.

1. The sooner the better. 2. Consult your convenience.—A. J. COOK.

I have fed so little that I do not feel capable to answer.—JAS. A. STONE.

1. The last of September. 2. As fast as the bees will take it.—R. L. TAYLOR.

1 and 2. See "A B C of Bee-Culture," or "Cook's Manual."—J. H. LARRABEE.

1 and 2. Feed in late September or October, as fast as the bees will take it. —J. A. GREEN.

1 and 2. Feed in October as fast as they will take it. Feed sooner, if necessary.—DADANT & SON.

1. August or September. 2. Yes, provided you can do so without exciting them to robbing.—J. M. HAMBAUGH.

There may be a fall flow. One year our hives were filled full the last ten days preceding frost.—MRS. L. HARRISON.

1. September. 2. I prefer to give one feed a day, if they will empty the feeders that often, until they have enough.—S. I. FREEBORN.

May not your bees get enough fall honey to winter? If not, feed. 1. In September. 2. As fast as they will take it.—EUGENE SECOR.

1. If the bees can make a living, you can wait until September, or early in October. 2. Feed as fast as they will take it.—E. FRANCE.

1. Feed once, and in sufficient quantity to keep the colony alive. 2. Feed fast enough so that you will have ample stores to carry the colony through the coming winter.—J. E. POND.

1 and 2. I would feed some *now* to promote breeding, if necessary. Then in September, unless they were gathering abundantly from fall flowers, I would feed rapidly for winter.—J. P. H. BROWN.

1 and 2. If there is no hope for any fall honey, I should feed each colony what they will need for winter during August. 1. Just before sundown. 2. As fast as the bees can take care of it.—C. H. DIBBERN.

1. The earlier the better, if you know they'll get nothing more, unless it be that by feeding later laying is kept up. September is late enough. 2. I've always fed fast, getting all taken in 48 hours. It may be better to feed slow.—C. C. MILLER.

1. Let them feed themselves as long as possible—something may open up for them yet. 2. At this time of the year I should feed moderately, but in September, for winter stores, give in the evening all they can care for during the night.—MRS. J. N. HEATER.

1 and 2. I feed when the bees need it, but according to my theory of wintering, there is no necessity for bees having liquid food in the winter. I can winter them with less trouble and expense, and more certainty, on hard food. The method is too long for this column.—EMERSON T. ABBOTT.

1 and 2. As a rule, it is bad policy to feed during the breeding season—after it has once well commenced. Fall flowers will surely give your bees something to live upon, and the buckwheat crop should help them some. The time to feed is immediately after the "fall flow"—feed them "as fast as the bees will take it."—W. M. BARNUM.

1. Syrup made of 15 pounds water brought to a boil; 30 pounds of granulated sugar stirred in the above, and brought to a boil again; set from fire and stir in 5 pounds of extracted honey. This makes the best food for winter I know of, and should be fed in September, after most of the brood has hatched. 2 Feed as fast as the bees will take it. —G. M. DOOLITTLE.

1. I would feed early enough so the bees could store and seal up the combs before cold weather. 2. I would feed so as to allow the bees to take in all you give them at nightfall. I have fed a gallon or more at a time, and the bees sometimes work slow when too much is given. They seem to take down the feed with more zeal when fed each evening.—MRS. JENNIE ATCHLEY.

1. If you have cheap extracted honey, it may be well to feed that. If not, sugar syrup is as good as or better than honey. Granulated sugar is generally recommended, but I prefer A coffee. It does not granulate as quickly as the granulated, and it is just as good. 2. If the colonies are weak, feed slowly to promote breeding, and when you have bees enough feed rapidly.—M. MAHIN.

1 and 2. See that your bees have enough to keep them "in good heart," by feeding them a little at a time, until after the first killing frost in the fall, then proceed to feed each colony until they have about 25 pounds of stores to winter on. Give the food as fast as the bees can handle it. But I hope you will be agreeably disappointed, and your bees will get fall honey to winter on.—G. W. DEMAREE.

Convention Notices.

UTAH.—The Utah bee-keepers will hold their semi-annual convention on the Oct. 4, 1894, at Salt Lake City, Utah. JNO. C. SWANER,
Salt Lake City, Utah. Sec'y.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

PENNSYLVANIA,—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

THE NORTH AMERICAN B.-K. A.—The Quarter Centennial Meeting of this Society will be held at St. Joseph, Mo., on Oct. 10, 11 and 12, 1894. It is the first convention of the North American Association beyond the western bank of the Mississippi, and large delegations from the great West will be present. We hope the East, the North and the South will gather with them. FRANK BENTON, Sec.
Dept. Agriculture, Washington, D. C.

NEBRASKA.—The next meeting of the Nebraska State Bee-Keepers' Association will be held at Lincoln, Neb., on the evenings of Sept. 11th, 12th and 13th, 1894, at the Honey Hall on the State Fair grounds, and in connection with the Bee and Honey Exhibit at the State Fair. An invitation is extended to every reader of the AMERICAN BEE JOURNAL to be present and sample the good things presented.
York, Neb. L. D. STILSON, Sec

Continuous Advertising, even if it be only a small announcement, pays the advertiser the best in the long run. Spasmodic advertising, like "spasms" of any kind, is unsatisfactory. To secure the very best results, year in and year out, you must keep your name and business before the public. Only by so doing can you hope to keep from being forgotten when the time comes that your would-be customers wish to purchase what they want.

BRACE-COMBS, AND THEIR ADVANTAGES.

BY G. M. DOOLITTLE.

It has been with much interest that I have read all that has been said *pro* and *con* by way of arguments, experience, desires, wishes, etc., along the line of wide and thick top-bars for the frames, to do away with brace and burr-combs, all, or nearly all, seeming to think that it would be a great advantage to "be rid of such a nuisance," or, at least, most who have written on this subject seem to think that these little bits of comb between the top-bars to the frames, and those between the top-bars and the sections, cannot be anything else than a nuisance. I admit that they are often an annoyance in the manipulation of the hive, but instead of considering them a nuisance, I consider these same bits of comb a great help, and for years I have allowed them to remain on the top-bars of my frames, just because I considered them of value; that is, I consider them of more value than they are an annoyance or disadvantage. Were I working an apiary for extracted honey, I might change my mind a little, perhaps, but for comb honey I would not allow any one to scrape them off my frames, or substitute thick top-bars in their places for 50 cents per hive.

Years ago, I thought of them as most people do to-day, considering them a nuisance, and not knowing of the thick top-bar project at that time, I scraped them off in the fall when I prepared my bees for winter; thus doing away with them until the next season, when the sections were on again, and the bees built them in during the surplus flow of honey. This I did until one fall, through an extra amount of other work, I did not get time to go over more than about two-thirds of the apiary in preparing for winter, guessing at the rest, or what amounted to the same thing, weighing the hives to come at the amount of stores they had, instead of inspecting every frame, as I usually do, so that I may know for certain just what each hive contains. Previous to this I had used the Hill device, or something similar, to give the bees a passage-way over the combs during the winter, as is so often recommended to be used under the bee-quilt; but frequent examinations during the winter satisfied me that these brace-combs, which I had heretofore taken so much pains to remove, answered every purpose of such a device, besides being much cheaper, as well as requiring no room in my shop, or lugging back and forth from shop to apiary both spring and fall, which they required when used; while with these brace-combs the frames were never misplaced in putting in and out of the cellar, as was sometimes the case where I had taken all off as above given.

But their greatest advantage appeared when I came to put on the sections, for the bees seemed to consider them as little ladders on which to climb up into the sections, for it was a very noticeable fact that the bees entered the sections much

the sooner where these brace-combs were left than they did those where they had been removed; and, if I correctly remember, I so wrote in the AMERICAN BEE JOURNAL at the time, advising all to remove the brace or burr combs from the bottom of the supers, but not from the frames.

The next year I tried the same experiment again, and so on for several years, until at last I became thoroughly convinced that these combs added largely to my crop of comb honey by leading the bees into the sections much sooner than they otherwise would go.

Now, some may say that it is no use getting the bees into the sections as soon as the first honey comes in; but I claim that this has very much to do with our crop of comb honey. It is not that the first three or four pounds of honey stored in the sections could be sold for so much cash that I wish it placed in the sections, although that might be quite an incentive where a person kept 500 colonies, the same amounting to about a ton of honey in that case; but all my past experience teaches me that, for every pound of honey stored in the brood-nest at the commencement of the season, or honey harvest, there will be five pounds less stored in the sections that year. Let the bees once commence to store honey in the brood-nest thus early in the season, and they are loth to enter the sections at all, and, instead of giving us lots of section honey, they will keep crowding the queen from the brood-cells more and more, storing them full of honey, until, when fall comes, we have little honey for market, and our bees in poor shape for winter.

Then, again, these thick top-bars, which are used to do away with these brace-combs, place a barrier between the brood-combs below and the sections above, instead of forming ladders to lead the bees to the sections. Who has not noticed that where an inch or two of sealed honey intervened between the brood in the hive and the tops of the frames, that the bees were much more loth to go into the sections immediately on the first appearance of honey from the fields, than they were when the brood came up all along the top-bars to the frames? This was one of the claims for the contraction of brood-chambers in the interest of comb honey, that where contraction was used the brood must come close to the bottoms of the sections, and, so coming, the bees were in the sections in a twinkling when the honey harvest arrived. I doubt not but what all will be free to admit that an inch of sealed comb honey would be a better leader to the sections than an inch of wood, as is now proposed. When we come to fully understand this fact we shall see that, wherein these brace-combs are the means of having our bees enter the section sooner, just in that proportion are they of value to us.

Try the experiment, brethren, and see if, at the end of such a trial, you will not be willing to put up with the inconvenience they cause you, for the sake of their great value.

Borodino, N. Y.

SOME SUGGESTIONS FREELY OFFERED

BY "BEN THERE."

O if I were a bee-keeper, what mighty things I'd do! Yes, I would. Every hive should be systematically placed, and all surroundings would conspire to a big honey crop! You thing not, eh? Well, let me outline my ideas, and if then you say, from reasonable reflection, that I am "all off," I'm a tenderfoot if I ever peep again!

I would first make a map—yes, sir, that's what I said—a *map*, of my surroundings, and hang it up on the wall for reference. So far—say, 40 yards—from the house, I'd place my bees, fronting east—a colony every six feet one way by as

many feet the other, so that I could work all around them. The exact location would be—if I had one—not far from fruit-trees, for both winter and summer protection. There would be no spot near them that would not be covered with honey-producing plants! Yes, sir; I'd have a regular lawn for them of white clover, and I'd spade up the very fence corners to plant catnip, horse-mint, pennyroyal, blackberries, raspberries, and every good thing that would grow up and choke the weeds down. Then, too, I'd see that there was a fairly deep hole in a shady corner of the "bee-field"—a miniature pond—where the bees could find drink; and not far from it I'd contrive a tin box to put salt in it, to help them in their work; kept covered from the rains, a handful will last a long time. You are just puckering your lips to say, "Put salt on their tails!"—but no matter.

O you think my ideas are too "fancy" and impracticable, do you? Well, I submit that it is quite as proper and easy to raise a lot of useful plants that bees can feed on and store honey, as to let that great heap of weeds grow rank, to seed yours and your neighbor's land! Besides, a rich lawn, or meadow, if you so prefer to call it, is not only good for the bees, but looks well, retains moisture in the ground, and is useful for hay. The weeds, the pigs won't eat!

Bees may be kept as houses are kept—in an attractive or slovenly way. It is just as easy to keep our surroundings nice, as slipshod. Besides, we owe a debt of encouragement to our neighbors in right-doing, we'd better pay as we go along.

"You wouldn't have the *time*," hey? Well, I'd *take* time, just as I would to eat and to sleep! Suppose the mechanics, and the farmers, and the good housewife, were to say *they* haven't the time to do things as they should be done? How would their work, their crops, and her house look? It is a fact that the better a thing is once done, the easier it is to do it afterward, *and it pays!* Perhaps *you've* been so slack in your methods that you feel you couldn't do differently, but wouldn't you *try* if there was more *money* in it? Well, I guess yes! You just start in right, and you'll stay there, because you will enjoy much greater pleasure, comfort and profit.

There, if you don't admit the force of these *facts*—why, I'll keep thinking you ought to!

VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

The editor of the "Old Reliable," on page 200, adds insult to injury. "Squirm as he may," he left the impression that shoes alone covered my feet, and now he says he couldn't "expect to see through cowhide shoes." Cowhide! He'll find a *cowhide* awaiting him if he ever ventures in these parts!

As to a contracted form for AMERICAN BEE JOURNAL, I don't like Am. Bee Jrnl. Isn't A. B. Journal better? Just as short, and whether you read it in its contracted form or in full, it's all right. [All right, Doctor. But you might as well make it "*Am.* B. Journal," and then it would be satisfactory enough.—EDITOR.]

1,250 pounds of honey from one colony (page 201) takes the lead. But isn't there a possibility of a mistake, with not the least intention to deceive? Some years ago I learned to be a little skeptical with regard to the yields frome some of my own colonies. A number of swarms would come out about the same time, then two or three go back to one hive. A big yield would result, but it would hardly be from one colony. Of course, there may not have been anything of the kind in this Australian case.

Pres. Abbott seems all waked up to some kind of necessity as to larger meetings of the North American, but like the rest of us, he's rubbing his eyes without seeing very clearly what ought to be done. The plain truth is that the meetings are largely local, and that the membership is confined almost exclusively to those who actually attend. The "representative delegate" idea that Pres. Abbott urges is good as far as it goes, but I doubt if he can bring it down to county societies. And how often is there anything that a society wants to instruct a delegate to vote for? Questions in practical bee-keeping are the most important things at a convention, and on such things it is not often that a man should be instructed beforehand how to vote. If I am not mistaken, the way some of the large memberships are secured in other countries is to have such advantages accrue to a member that he will be glad to pay his membership fee even if he doesn't attend. What inducement is held out for me to become a member if I don't expect to attend?

Doolittle says (page 209) that you can tell whether bees are queenless by giving them unsealed brood, when, if they are queenless they will start queen-cells. Nearly always that's good proof of queenlessness, but there are exceptions. This summer I introduced a queen to No. 28, and on looking a few days later I found a number of queen-cells started. I said at once, "They've killed their queen." Looking farther, however, I found the queen all right. I also found queen-cells in No. 1, whose queen had not been changed for a year, and as they were post-constructed cells, I was surprised to find the queen all right. In both these cases, however, I think the bees supposed there was danger of the queen being destroyed, as in the case of No. 1 a number of foreign bees had been added.

What a difference a little thing like a comma sometimes makes. On page 211, 2nd column, line 4, "three strips of wood—one wide, one on each side, and a narrow one....." puzzled me for a time. You see four strips are enumerated instead of three, but if you drop out a comma and make it "one wide one on each side," then it's all right.

That plan of W. C. Lyman is quite interesting. The plan given by T. I. Dugdale I can endorse from actual trial. Possibly the Lyman plan is better. But why not merely leave a hole for drones to get out, without any escape? The escape may prevent bees from using that place as an entrance, but what harm if they do?

Now comes F. L. Thompson (page 213) as champion of those troublesome things—closed-end frames. I have one colony in them, and I dread to touch the sticking things. And yet, and yet. Between you and me I've a kind of a notion that the colony does a little better on account of being in those frames. You see it's a good deal as Bro. Thompson says—there's no big hallway at each end of the hive to keep things cold, but all is closed up as tight as in a box-hive. Good joke on us if we'd all work toward closed-ends some of these days.

I wish Dr. Hicks had given chapter and verse where in Holy Writ we read that honey was prominently used as a medicine.

W. H. Morse's advice to plant linden or basswood is good. There are two ways to get the thing done without much expense. One is to get other people to plant them for you. Suppose you want to plant 100 trees. Of course you must get your trees before you plant them. Now when you have got them, if you give half of them away to people that want to plant shade trees within a mile of you, it will be just about as well as if they were on your own land. Or, you can sell them at a bargain.

Another way is to go to your nurseryman and agree to pay so much a hundred for him to put in a stock of young basswoods in his nursery. It will then be to his interest to dispose of those trees to be planted as shade-trees.

I've sometimes wondered what made John F. Gates always so jolly. Perhaps the explanation is on page 216—he's a Sunday-school man. But you needn't worry about Bro. Clarke, John. Now that he holds only as a kind of possible notion that sting-trowel theory that he formerly gave out as a fact, he'll not be so spunky if any one touches it. Marengo, Ill.

THAT WINTER PROBLEM AGAIN.

BY A. G. AMOS.

In reading Mr. J. E. Pond's article, on page 116, in regard to wintering bees without protection, I thought I would relate a few circumstances which have come under my observations.

The last two winters I have packed all my bees in chaff except two hives each winter, and these were 1½ story 10-frame hives, all very strong in bees and honey, and they also had the supers replaced, filled with chaff after the sections were removed in the fall. As a result, these bees either froze or dwindled away in the early spring. While the loss of the colonies that were packed in chaff was quite heavy, yet I am in favor of chaff packing.

Again, I was called on in the spring to transfer a colony of bees for a friend, as I was informed by him that the colony had thrived and sent out large swarms for the last two years, but they always went to the woods, and were lost. If I were to try to describe the hive they were in, I am afraid I could not do it justice, so I will give a faint idea of it by saying that it was composed of two rims made out of coarse old hemlock boards, each rim about 10 inches high and about 17 inches square, with a board laid on top, and as it was not wide enough, a piece of old oilcloth was laid over it. This constituted the top. And as for ventilation, I am sure they had plenty, for the bees were working out of the top, bottom, and all four sides. The entrance under the edge of the cover was equivalent to a hole ½x5 inches; yet the bees wintered out-doors, and the only protection they had was a stone-wall on the north side of them; and I will say that at the time I transferred them they were stronger in bees than any in my own yard.

What does the above prove? It certainly proves that bees will live and prosper with as little care as any animal; but to be profitable they must have care and protection the same as other stock. Delhi, N. Y., Aug. 4.

PURE AIR AND PURE FOOD FOR WINTER.

BY C. W. DAYTON.

Referring to Mr. Theilmann's experience as related on page 438 of the BEE JOURNAL for April 5, 1894, I would say that, though bees in a cellar of low temperature lowly murmur, it may not necessarily be an indication of contentment. I believe impure air to be the cause of noise. Cold, being a stronger element, makes them quiet, but, none the less, they must keep up warmth. It has been said that to expose a cluster of bees to zero weather the outside bees will move toward the inside of the cluster, and those inside will change to outside. Then, as the temperature rises, this movement decreases until it stops somewhere about 55° or 60° above

zero. No matter how rapid or slow this movement, it causes no "roar;" only a gentle "murmur."

Then from whence comes the roaring? When we begin to smoke bees they begin to fan with the wings, and, consequently, begin to roar. If we attempt to blow smoke in at the entrance of the hive, they instantly set up a violent fanning of wings which forces the smoke out again. At the same time there is a roar. They roar also while evaporating honey, because there is a fanning of wings to create circulation of atmosphere. This may be a roar of contentment, but the other is certainly a roar of discontentment, and there probably is no ear which can distinguish one from the other.

There also is a fanning of wings to drive out impure air, or, more correctly, to change air, which they may suspect may injure their stores, if not themselves, and which, in truth, it may.

If the smoker is turned upon a cluster where the bees are more or less stiffened with cold, they will move their wings very little. To fan would increase the cold and exposure. Although this is a condition of greater quiet, how could there be one of more discontent, namely, by coupling with it improper stores? It may require some lapse of time to note the effects of poor food. In fact, it may require a lapse of time to be affected by this changing of positions in the cluster, or the fanning of wings, but all three—poor nourishment, activity and labor—wear away their vitality the same as an unsheltered horse or cow, which must exercise to keep up sufficient warmth, comes out in the spring thin in flesh.

Some writer has advanced the idea that bees, when poorly wintered, lose flesh or adipose. Be this as it may, all know that they are sometimes wonderfully short-lived after being removed from the cellar. With the best of stores, and no symptoms of diarrhea, there gets to be few bees in the colonies, and they are supposed to have dwindled because of old age. Low temperature of the cellar may keep the bees in the hives, but pure air prevents the desire to fly out.

In case the bees cluster closely in the center of the brood-nest, the rest of the hive contains cool air, without being drawn in by respiration. At the point where the cool air and the warmth of the cluster meet, condensation on the combs of honey takes place. Sealed or unsealed, water gets into it and ferments, and the bees consuming it, brings disease.

In a right temperature, the bees do not cluster compactly, but stand upon all parts of the combs containing honey, and the air that is drawn into the hive is at once freighted with respiratory impurities, and forced out again.

Nearly all colonies which we find to have starved, are also found to have been the driest, cleanest and strongest in the lot. Not having much stores, it was more likely to be covered with bees, which protected it from the condensation of moisture, and preserved their good condition.

Florence, Calif.

THE PRESENT OUTLOOK—MARKETING, ETC.

BY B. TAYLOR.

In early spring the season of 1894 promised to be one of the best in many years for bee-keepers. The weather was favorable, and one of the main stand-bys for honey—white clover—abounded everywhere. There were frequent copious rains, and we were justified in predicting an old-time yield. But after all these cheering signs, drouth set in at the beginning of summer, and at this date (July 31st) yet holds sway. There has been but one moderate shower for many weeks, and the commonly green grass of our lawn is in some places as dead and brown as

the dusty public road near by. Corn is shriveled, and garden vegetables small and drooping. Buckwheat is prematurely turning brown, and wild flowers have nearly disappeared, making it certain that there will not be a large fall flow of nectar. This may seem discouraging talk, but it is true, and truth is always in order. Unfavorable summer weather could dispel the bright prospects of spring, but no possible fall conditions can restore the dead flowers again this year. So we had better look the situation straight in the face, and make the best possible use of it.

In our own yard we shall remove all surplus supers early, and let the bees have a chance to fill the brood-nest with winter stores, if any nectar is to be had. During dry times honey-dew is most plentiful, and we have no fears for winter stores; but if colonies are found light, they should be fed early, and made ready for safe wintering.

Our readers will remember that in the past we have been expressing our belief that a paying surplus could be had even in a poor season, by a proper understanding of the business and thorough preparation, so as to take the best advantage of all opportunities. This season gave us an opportunity to practice what we had preached. Basswood was the only source of surplus here this year, the bloom was fairly plenty, and lasted about two weeks. By strict attention early in the season, we had our colonies strong at its commencement, and our new hobby of sections of finished combs all ready. We have secured a paying surplus crop this poor season; that is, we have at least 50 pounds per colony of splendid white honey, and that pays us well for our labor. But for the preparation named we are quite certain we should have gotten little or no surplus, as we have visited a very intelligent neighboring bee-keeper who has 100 fine colonies of Italian bees, but they were managed in the usual way and gave no surplus. In years past a good crop of suplus honey was in our locality quite a certainty, with fair management, but each year it seems to be less certain, and better methods have become a necessity if we are to make it pay. These bad years only compel higher skill and greater knowledge.

The Marketing of the Honey Crop.—For years we have advised bee-keepers to cultivate local markets. There are many risks in shipping comb honey, especially to distant markets, with the facilities and skill for crating properly possessed by the average bee-keeper. But little comb honey ever reaches its destination without damage and loss to the producer. For some years we have made special effort to introduce extracted honey in our own local markets, and by having our goods of the very highest quality, we have in three seasons easily established a demand for all the liquid honey we can produce. The same can be done in each locality, provided none but first-class, properly cured honey is offered. We advise taking a sample of the honey for testing, visiting the best families in town and country, taking orders and delivering the goods, being careful to have the honey equal or better than the sample. In this way we find a market for all our extracted honey at 12½ cents per pound. Comb honey can be sold in the same way. This year the crop is so small there is no need of any haste in selling, and those who rush to sell for the first offer are sure to suffer loss.

Preparing the Bees for Winter.—It is none too early for the wise bee-keeper to begin preparations for winter. This season is such that unless early and wise precautions are taken, there is sure to be heavy loss in the coming winter. Each colony should be examined to see that it has a good queen, and then fed a few ounces of sugar syrup or honey daily until the 15th of September, so that brood-rearing may be kept up, and hives stocked with young bees for winter. We should not lose faith in our pleasant calling on account of this poor season. The cause was

climatic, and after we have done *our* duty all must bow to wind and waves. Agriculturists and horticulturists have suffered equally, or even more than the bee-keeper. Let us prepare to renew the battle all along the line.—*Farm, Stock and Home.*

Forestville, Minn.

BEE-BUZZINGS FROM BILTMORE.

BY ROBERT PESTELL.

Agreeable to the request made in the BEE JOURNAL of July 26th, asking: "What have you learned this year in your apiary? Have you discovered any new kinks (or is it kicks) that are worth knowing?" I will endeavor to contribute my portion.

Biltmore, as many of the readers of the BEE JOURNAL may know, is the name given to the estate purchased by Mr. Geo. Vanderbilt, and is situated near Asheville, N. C. The Baron de Alingo has the entire management of the agricultural operations here. He has, by his intelligently directed energy, made the once barren hillsides and unkempt valleys to blossom like a veritable Arcadia. Not until last autumn did he lay the foundation of an apiary—some 30 colonies occupying dovetailed hives, being then purchased. Upon my arrival here, early in April last, I found 17 colonies of the 30 living, they being in a very weak coudition. The severe frosts during the latter days of March rudely stripped the forest landscape of its spring garment, reducing it to its winter costume, thereby utterly destroying all outside bee-provender, so that it was only through the medium of heavy artificial feeding that the bees were kept going. The continued drouth during the late spring and early summer kept the thermometer of our honied hopes at a low ebb, which has since, however, been raised almost to set fairly a most bountiful sourwood harvest, which we are yet enjoying.

The colonies have been increased from 17 to a present number of 46, principally by nuclei and introduced queens. This increase, with the addition of some considerable quantity of surplus honey, is encouraging.

The accompanying sketch is one I have made of an old-time log-constructed farm-house—one of the few old-timers remaining on the estate—where a portion of the apiary is located. The barrels shown in the illustration have been committed to the cellar preparatory for a brew, no further indication of bee-paralysis showing. (See Mr. Thompson's article on barrels used as a cure for bee-paralysis, published in the BEE JOURNAL of July 19th.)

Not a great distance from the old-fashioned homestead stands the palatial residence of Mr. Geo. Vanderbilt, now nearing completion, and occupying a commanding situation overlooking the lovely and exceedingly fertile Frenchbroad valley which is framed by a chain of Blueridge Mountains, bathing their sylvan-clad summits in a soothing mist of azure. Through the valley meanders, like a silver band, the Frenchbroad river, seemingly kept in bounds by the walls of the forest which nestle on its brink. Traversing the woodlands of the valley are many miles of undulating and gracefully, yet decidedly curved, carriage drives, which have been surveyed and constructed under the direction of Mr. Geo. J. Weston. Their windings constantly unfold to the vision of the traveller fresh vistas of forest grandeur.

Over this lovely landscape, and under a canopy of the bluest of blue skies, buzz the bees of Biltmore.

Biltmore, N. C., Aug. 5.

[The pencil "sketch" mentioned above was received with the article, and, as Mr. Pestell says, truly represents "an old-time farm-house."—EDITOR.]

The East Tennessee Convention.

BY H. F. COLEMAN.

The attendance at the East Tennessee Bee-Keepers' Convention at Whitesburg, on Aug 16th, owing to the meeting of a Baptist association near by, was not what was expected, but was fair. The bee-keepers present had a jolly good time, and spent the day pleasantly. Brother Webb, of Sutton, whose presence was expected, from some cause was not there, and we failed to form his personal acquaintance, but he will probably attend our next meeting.

Your correspondent had the pleasure of testing several samples of persimmon honey, and found it to exceed his expectations. In color it is a golden yellow, and its flavor and density are all that can be wished. Brother Root, no doubt, would enjoy a sample of it.

By special invitation we visited the home and apiary of W. A. Lee, of Three Springs. Mr. Lee is a model farmer of East Tennessee, and is one of the farmers that make bee-keeping pay. His apiary consists of only 26 colonies, but they are managed so nicely that they yield a profit every year. The idea that bee-keeping cannot be made profitable by farmers is a mistake, as is verified in this instance.

The Feathers family at Whitesburg entertained the bee-keepers, and we found them all truly interested in bee-culture.

We will speak more of the proceedings of the Association later.

H. F. COLEMAN, *Scc.*

Sneedville, Tenn.

Central California Convention.

BY J. F. FLORY.

A special meeting of the above Association met in the City Hall at Hanford, on Aug. 1st, to discuss the question, "How to dispose of our honey to the best advantage."

President Hart called the meeting to order, and the Secretary then read the minutes, which were accepted. Most of the day was taken up with the question of marketing, and the amount of tare that should be deducted for the cases. There wasn't the least inclination manifested by any to consign any more honey for the present. The sarcastic thrust at some of our commissioners was anything but pleasant, while those who have dealt fair are also brought to public notice.

THE QUESTION OF TARE.

In extracted honey none wished to sell wood for honey, but serious objections were made to knocking off tare for cases, cans, and then several pounds of honey besides, as we have done in three carloads of honey sold in the last ten days. Cases generally weigh 10 pounds, while an occasional one weighs 12 pounds. And to cover the weights of all, to avoid the weighing of each case separate, as was resolved by the State Association at Los Angeles last January, that we add 10 or 20 per cent. to the average case, so as to cover the full weight of all cases. And to let the buyer know that we wanted to do nothing but what is fair. Upon motion it was unanimously decided that we deduct 12 pounds per case for tare, and no more.

As the cases for comb honey vary in weight, it was decided by motion that they be weighed, and 10 per cent. of their weight be added to them for tare. On the price of honey, viz.: 4½ cents for bright amber, at which price the three carloads above mentioned were sold, and it was unanimously decided, on motion by a standing vote, that inasmuch as the crop of California is the shortest known for many years, and from the latest accounts in the East, that their crop was also short, that we are not getting market value for our honey, and that we will not sell for less than 5 cents until our next meeting, on the first Wednesday in September; and that the Secretary inform the different honey-dealers of this fact, as well as that we have a fine lot of honey for sale.

During noon the Secretary placed on the table samples of N. D. West's queen-cell protector, queen-cages, and his improvement on it for the safe introduction of queens; and samples of beeswax made by his improved solar wax-extractor. Through a mistake the extractor was not brought. Also sample hive with honey in clamped sections with wide frames, just as taken from the hive, to

show with what ease the honey can be handled, and how clear and free the sections are from gum and glue. Mr. Stearns, of Selma, a large comb-honey producer, remarked that the Secretary could not keep his sections so nice and clean with his bees in this country, to which he replied: "There is an occasional colony that will daub and soil anything."

Many other minor points were discussed to the interest of the association.

During both the forenoon and afternoon meetings the Hall was crowded to its utmost capacity, and a number were not able to gain admittance, yet it was decided that not one-half of the bee-keepers in this and adjoining counties were present.

Notwithstanding the desperate and unmerciful attempt made several years ago to expel the bees as a public nuisance from Kings, then part of Tulare county, it was clearly manifested, from the bee-men present, that the little busy bee will bring in a larger revenue into this section of country, at least this year, for the amount of capital and labor invested, than any industry we have.

On motion it was decided to adjourn, and meet again at our next regular meeting, viz.: the first Wednesday in September, at Selma, Fresno county.

J. F. FLORY, *Sec.*

Lemoore, Calif.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

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Great Premium on page 286!

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

The Thompson Hive.

I would like to tell D. S. M. (see page 171) that he can't well use the sections or any of the improved surplus cases on the Thompson hive. If I had two dozen Thompson hives, or a whole apiary of them, I would discard them at once for some of the popular modern hives—the so-called dovetailed, for instance, is superior to it in every respect.

G. H. ALLEN.

Alderson, W. Va., Aug. 20.

Too Dry and Hot for the Bees.

Bees in this part of the country have not done very well on account of starvation, caused by the drouth and hot winds. There was no name for it, all summer, until lately we had some good rains. Corn will be a small crop. Some on the hills and late planting is drying up. A good many bees have died here, but those that revived are doing well now.

FRANK HENTRICK.

Wall Lake, Iowa, Aug. 22.

Some Big Yields of Honey, Etc.

We have had a regular boom of honey this year. Those who live in the mangrove regions have done the best. One bee-keeper with 100 colonies has taken 30,000 pounds—an average of 300 pounds to the colony; and another with about 50 colonies averaged 400 pounds per colony. Saw palmetto gave a big yield, and then another good flow of mangrove. Last year was a total failure of mangrove, and next year may be as bad, but we all have to take the seasons as they come. I have an apiary in Iowa that has not yielded a pound of honey.

A friend used a tablespoonful of sulphur per colony for bee-paralysis, and

thinks he has cured it. Your correspondents do not say how they apply it, or how much. G. W. WEBSTER.
Lake Helen, Fla., Aug. 20.

[We would be glad to have those who have found the "sulphur cure" a success, explain its use, for the benefit of our readers.—EDITOR.]

A Fair Yield of Honey.

My honey crop averaged 50 pounds of comb honey to the colony. I have 52 colonies. HOMER SCOTT.
New Hudson, Mich., Aug. 15.

Good Crop Expected Yet.

Bees in this locality, bordering on the Ohio River corn lands, began storing the surplus on Aug. 1st. Farmers in our vicinity have given up their corn, it being all burnt out on account of not having rain. This leaves us all the smartweed and fall flowers to grow and thrive and produce nectar for the bees. The flow is very heavy, one colony having stored 24 pounds of comb honey in 7 days. All comb honey on the market here is from honey-dew, also some alfalfa — '93 crop shipped from Nevada. However, this finds slow sale, on account of being partially candied. Therefore we shall have a good market for our crop, which ignominiously failed to "show up" prior to this date. The farmer's misfortune is my good luck. I shall therefore get a very good honey crop, and expect at least 5 tons this season yet, as we always get a heavy flow in September. J. C. WALLENMEYER.
Evansville, Ind., Aug. 10.

Bees Did Well—Convention, Etc.

My colonies have done well for this season. They gave me a surplus of 350 pounds of honey up to this date—211 pounds being extracted. This honey was from sourwood. The sourwood honey-flow was extra good in this section.

On Aug. 16th I boarded the train at Greenville for Whitesburg, to attend the East Tennessee Bee-Keepers' Convention. When I arrived at Whitesburg, Bros. Coleman and Feathers met me at the train, and conducted me to the home of Dr. Feathers at that place.

After we had rested, and examined Mr. Porter Feathers' bees, we assembled at 10 o'clock in the Methodist church. We adjourned for dinner till 1 o'clock. Some of us took dinner with Bro. Feathers. We had a fine dinner, for which we return many thanks to them.

Mr. Porter Feathers is a young bee-keeper just beginning. He has 12 colonies in fine condition.

I have worked for honey and against increase. I also worked my bees for wintering. I had no swarms this season. There have been some swarms in this section, but they were mostly in July. I have heard it said this way:

"A swarm in May
Is worth a stack of hay.
A swarm in June
Is worth a silver spoon.
A swarm in July
Is not worth a green fly."

A. C. BABB.
Greenville, Tenn., Aug. 18.

Had a Poor Honey-Flow.

I have 20 colonies of bees. We have had a poor honey-flow this season. My average is not more than 10 pounds per colony. N. S. WILL.
Rowlandville, Md., Aug. 20.

Quite a Light Crop.

The honey season started with exceedingly bright prospects, but the drouth made short work of the apiculturist's fond hopes, through this locality. We had no rain for 8 weeks, till yesterday (Aug. 19) when we had a grand refreshing shower. The honey crop here is quite a light one. J. A. GOLDEN.
Reinersville, Ohio, Aug. 20.

A Lady's Experience With Bees.

It has rained quite hard within the last half hour—the first for weeks, consequently we have suffered most terribly from drouth, pastures brown, corn drying up on the upland, without forming ears. And how the poor bees have made a living for several weeks past, is a mystery, but I think they made good use of the time during white clover bloom, and yet only the strongest colonies, and those that did not swarm, gave any surplus.

On account of the drouth last fall, my 8 colonies were short of stores, yet by feeding some they came through the winter, but the new colonies were very weak, so they have been all summer building up. I divided one strong colony, and bought a 2-frame nucleus and a tested five-banded queen, and she has

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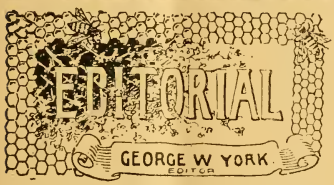


St. Joseph, Mo., is the place of the convention.

Oct. 10th, 11th and 12th, are the dates of the convention.

The C. B. & Q. (Chicago, Burlington & Quincy) railroad is the *best* line to take to the North American convention which meets at St. Joseph, Mo., on Oct. 10th, 11th and 12th. Don't forget it. It's the "C. B. & Q."—often spoken of as the "Cheapest, Best, and Quickest." More particulars next week.

Pomona College, located at Claremont, Calif., received a whole page "write up" by Prof. Cook, in last *Gleanings*. After reading it, we felt just like packing up our few belongings, and starting for that glorious school. But then, it's pretty late in life for us to think of taking a college course, so we'll have to give it up. However, we're very glad to know that Prof. Cook is working in such a grand institution. Better write him for catalogue and circulars of the college, if you have any young folks who ought to get into a good and safe school.

Reporting Conventions is a matter that Dr. Miller very properly touches on in his comments on page 311 of this number of the BEE JOURNAL. As usual, he has the right idea of the thing. While we are always glad to publish convention reports, we have often thought that such reports could be given in much more condensed form, and thus be of greater interest to all the readers of the BEE JOURNAL.

We hope that Secretaries will take Dr. Miller's suggestions in the same kindly spirit they are offered, and profit by them. Let us have only the practical "bee-talk" of conventions for publication. Why not have a little rivalry among secretaries hereafter, and see who will give the best, practical report? When Dr. Miller finds one in the BEE JOURNAL that he can commend as a model, no doubt he will mention it.

Mrs. Atchley reported on Aug. 24th, that at Beeville, Tex., they had a rain which assured a fall crop of honey there. We wish that other parts of the country could be similarly favored. It has been a very dry season in this part of the country, as well as in many other localities.

J. A. Golden, of Reinersville, Ohio, has sent to us a number of fine photographs representing various implements and things in the apicultural line. We wish to thank the generous sender, and assure him that they are much appreciated by "ye editor."

Bro. Ernest Root, finding that he could remain away rom Medina longer than at first contemplated, stopped with us

on his return trip. After leaving Dr. Miller on Friday, Aug. 24th, he went into Wisconsin, calling on Harry Lathrop, of Browntown; E. France & Son, of Platteville, and others.

He walked into our office again on Tuesday morning, Aug. 28th. That forenoon he called on Bro. Newman, and in the afternoon we two "youthful editors" went down to the old World's Fair Grounds, and beheld the ruins of the once beautiful, fairylike White City. The great fire which occurred about two months ago, destroyed many of the largest and most artistic buildings—such as the Administration, Agricultural, Machinery, Electricity, Mining, Manufactures and Liberal Arts, etc. Oh, what a conflagration it was! From our home—6 miles north of Chicago, and 14 miles from the place of the fire—we could see the reflection of the fierce destroyer, as plainly as if only a mile away.

After strolling across the restful "Wooded Island," and gazing for a time upon the huge piles of fallen iron arches, burned bridges across lagoons, and the general wreckage, we visited the Field Columbian Museum, which occupies the building that contained the Art Gallery of the Fair. Within its walls are gathered portions of the various exhibits seen last year. Probably the most complete is that representing the railroad and locomotive improvements, made principally by the Baltimore & Ohio Railroad Company.

Well, to condense what might be a prolonged story, we would say that we had what to the writer was a most enjoyable visit with Bro. Root. We were so glad to have a good opportunity to know him better, for we believe that as editors come to understand each other's motives and aims, just in such proportion will their efforts be in harmony and for the best good of the industry which their several periodicals represent.

On Wednesday morning our brother editor started on his homeward journey, leaving behind him firm friends who wish him everything that is pure and good.

A Hive Factory Destroyed.—The California Bee-Hive Factory of B. S. K. Bennett, in California, was completely destroyed by fire on Aug. 23rd. Mr. Bennett expects to rebuild as soon as possible, and be ready for the coming season.

These Bee-Jottings were handed us by Dr. Peiro a short time ago:

Mrs. D. Fobes states that her boy's lungs were in a precarious condition, and when physicians' remedies failed, she resorted to the plentiful feeding of honey, with happy results. The boy is now well.

Notice is taken that foreign bee-papers copy widely from Dr. C. C. Miller and the AMERICAN BEE JOURNAL.

L'Apicoltore states that another remedy for bee-sting is the application of turpentine to the parts stung. It removes the pain, and prevents swelling.

The same journal informs its readers that a small quantity of honey worked into butter renders that article more palatable, and prevents rancidity. Incidentally it observes of what great benefit to apiculture would be the general application of the suggestion in the more liberal demand and price of honey which is now being sold at such precarious terms!

The same paper quotes the statement that sassafras limbs placed across a hive (I suppose the old-fashioned kind), to which the bees can attach the comb, prevents the retention of the lice that usually prevail—owing to the peculiar odor of the wood.

DR. PEIRO.

Bro. Chas. Dadant—the venerable and well-known member of the firm of Chas. Dadant & Son—is sojourning for a few weeks at Sturgeon Bay, Wis., for the benefit of his health. We hope he may find much relief from the troublesome hay-fever which so afflicts him in southwestern Illinois every year.

The Price Too Low.—In the *Review* for August, Bro. Hutchinson had this editorial in answer to what we said on page 169 of the BEE JOURNAL:

AMERICAN BEE JOURNAL TOO LOW IN PRICE.

Bro. York, of the AMERICAN BEE JOURNAL, says that one of his subscribers complained because better paper is not used in printing the BEE JOURNAL. Very properly it is explained that at the present price, and the "slow pay" of some of the subscribers, better paper cannot be afforded. Let the price of a journal be what it may, there will always be delinquent subscribers unless the "pay in advance" rule is strictly enforced, and this greatly reduces the list, as I know by a costly experience.

The simple fact in the case is, that the price of the AMERICAN BEE JOURNAL is too low. Class journals can never be published at such low rates as in the case

general newspapers and magazines, as they can never secure so large lists of subscribers. Most of our bee-journals are run in connection with a supply trade, and this enables their proprietors to furnish the journals at prices which allow of very small profits unless the list is large. Bro. York, why don't you raise the price of your paper, or else add a supply trade?

Perhaps some will think that this is none of my business. Perhaps it isn't; but Bro. York has worked hard, and is yet working hard, and while he is making a good journal—much better than some of us thought he would—only an editor knows how *much* better he could make it if he only had plenty of money to spend upon it. If one-half were added to the price, I will warrant that twice the value would be returned to the subscriber in the way of better paper, more illustrations, and an increase in valuable correspondence, etc.

We want to thank Bro. Hutchinson for the implied compliment in the foregoing, for he practically admits that the readers of the BEE JOURNAL are getting more than they are paying for. And while the price of our journal may be, as he says, "none of his business," still it shows a very kindly spirit and interest on his part, when he is moved to write as he has in the editorial which we have copied.

But before going any further, we want to assure the reader that the price of the AMERICAN BEE JOURNAL is not going to be raised right away. So don't become alarmed without good cause.

Bro. H. asks us: "Why don't you raise the price of your paper, or else add a supply trade?" To answer the latter part of his question first, we must candidly say that, *at present*, we don't believe that a bee-paper and a supply trade should be owned and operated by the same management. *We* prefer to keep the BEE JOURNAL independent of it, and thus be free from any suggestions that we as its publishers are pushing any particular bee fixtures or implements upon bee-keepers, because we are financially interested in their sale.

Secondly, why don't we "raise the price?" Echo answers, "Why?" Well, reader, what do you think of it? Are *you* willing to pay 50 cents a year more for "better paper, more illustrations, and an increase in valuable correspondence, etc.?" We'd like to hear from our readers on this point, when they are renewing their subscriptions. We are ready and very willing to give you a "*much* better" journal if you are willing to pay for it. Yes, *this* "Barkis is willin'!" What do *you* say?

Fumigating with Brimstone,—Bro. J. Van Deusen, of Sprout Brook, N. Y., in the August *Review*, gives his method of burning brimstone for fumigating purposes, as follows:

Take a clean iron kettle, free from ashes and coals; get the butt end of an old sleigh-shoe as long as will lay flat in the kettle, or, what is better, an iron ring three inches inside diameter made from one inch iron. Heat it until you can see it is red in the dark. This can be handled with a stove-poker. Put the roll of brimstone in the kettle, and put the iron on it, and if not too hot it will burn slowly, holding a fume a long time. If the iron is too hot, it burns quicker, and does not hold the fume as long or as safely. Set the kettle up on bricks to make it safe from the floor.

This may help those who wish to fumigate empty combs or comb honey in order to kill the moths that are such destroyers.

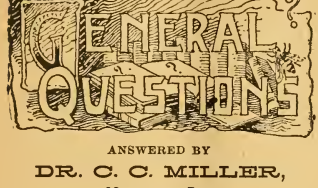
Bees and Tobacco.—We learn through *Gleanings* that in the Patent Office at Washington, D. C., bee-keeping, being a subject rather too unimportant to have a department of its own, is assigned to the department of tobacco-growing! Think of it—apicultural inventions mixed up with the inventions for making cigars, cigarettes, etc. Ugh!

Bro. Root learned of this through a Mr. Danzenbaker, a Washington resident, who was visiting him. Mr. D. suggestively remarked: "The Patent Office puts bees and tobacco together; but A. I. Root separates them." So do we. No tobacco or strong drink in ours, if you please!

E. E. Hasty, in the *Review* (in that way of his which is sometimes called "inimitable"), pays his respects to the new department of "Our Doctor's Hints." Among other things he says:

The matter in the department is really good, and pleasantly told. 'Spects it will find fully as many readers as the bee-articles do. Dr. Peiro, of Chicago, is the department conductor.

The St. Joseph, Mo., Fair will be held Sept. 10th to 15th, inclusive. Nearly $100 is offered in premiums in the apiarian department. Mr. John Krahl, 1913 Holman St., St. Joseph, Mo., is the Superintendent of the bee and honey part of the Fair. For Premium List, or any desired information, just write him.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Listen Here, Bee-Keepers.

I want to say a word to those who are interested in reading this department, especially to those who ask questions. A good many questions come to me asking for a private answer, sometimes adding, "Please answer by return mail and give full details." Now of course there can't be a great deal of accommodation about a man who isn't willing to spend a few minutes writing a few words to help out a fellow bee-keeper. You would not refuse an accommodation of that kind, would you? But suppose it took a whole day of your time? Now if I were to answer privately all the questions I am asked, it would not only take a day, but it would take a number of weeks every year. Indeed, I have had letters more than once that I could hardly answer in full if I took a whole day to each one. Many, however, require only a short answer, and I should be glad to reply to such at once privately, only if I should attempt to do so I should be hopelessly swamped in trying to get through all that comes in the course of the year. Some seem to think it is all right if they only enclose a postage stamp. But what good is it to me to get a postage stamp only to send away again? The fact is, I always have a feeling of relief when I open a letter and find no postage stamp enclosed.

Now please understand that I like to get questions. The more the better. But I want to answer them in print, for two reasons. One reason is, that others will get the benefit besides the one who asks the question; and the other reason is, because the editor pays me for answering.

One other point: If you want an answer in this department, *always* say, "Answer in A. B. J." Otherwise how am I to know whether you want the answer here, or in one of the other periodicals I write for?

Now come on with your questions, and I shall be glad to be your obedient servant. C. C. MILLER.

Drones Changing Hives.

Do drones change hives? That is, leave one hive and take up their abode in another?

ANSWER.—Yes, indeed they do. Last year I had it very clearly proved. I had a colony of Punics, and the drones were jet black, quite different from others, and I found these drones scattered about, some of them in pure Italian colonies.

To Prevent Increase.

When a swarm issues, cage the clipped queen, and take from the colony two or three frames of brood with adhering bees and place in another hive, and give them the queen. Fill up the hive from whence the frames were taken, with division-boards or dummies, and leave on the old stand, and let the swarm return and enter. In 6 or 7 days remove all queen-cells but one. If it hatches and is a good one, and returns from mating all right, dispose of the old one, and return the frame and bees, otherwise return the old one to the hive. Will this plan prove a success?

ANSWER.—I've practiced the plan successfully, but it isn't easy to be sure of killing all cells but one, and sometimes the bees will swarm later on.

Swarms Swarming Out.

I have been badly troubled this year by bees coming out within a day or so after being hived. I use the B. Taylor sectional brood-chamber. I hive the swarm in a single story on the old stand, and put on it the super in which the bees have been storing, sometimes putting an empty super between the partly-filled one and the brood-chamber. Next day the bees are pretty sure to swarm out again. I have tried giving them a frame of brood, but it's no use, out they come. What is the trouble? K.

ANSWER.—Sometimes bees swarm out because of heat. Shading the hive will help in such a case. Possibly a little of it is in the blood, and a different strain of bees might act differently.

I am a little inclined to think that the partly-filled super cut some figure in the case. You know that a feeling of wealth and prosperity is one of the elements necessary for swarming. Take every drop of honey from a colony preparing to swarm, and they are likely to defer their exodus. On the contrary, crowd honey in on them and you may start to swarming a colony that otherwise would not have thought of it. Now if the same trouble comes next year, try leaving off the partly-filled super until the bees get to work in the new hive. Put an empty super on if you like, but don't put on the one with honey till perhaps the third day. Possibly that may help you out in good shape.

Swarms Clustering.

When two or more swarms issue, or are on the wing at the same time, the queens having been caught and caged, will the swarms ever settle together? If so, when they break cluster, will they separate and each return to the several locations from which they came, as a single swarm will?

ANSWER.—I've had them settle together in a cluster as big as my body, and almost as long as I am, and sometimes they would hang there half a day. Sometimes they would go to their own hives, and sometimes all pile into one hive.

Hiving Two Swarms Together.

What are the disappointments likely to be met with in hiving two swarms together, as you intimated some time ago? How would this plan work? Cage the clipped queen when the swarm issues, and remove the old colony to a new location, and throw a cloth over the entrance; place the hive containing the swarm with which it is desired to hive the swarm which is out, and after they have entered change back. (I would not change back with the first swarm). Will they enter? If so, will it be peaceable, generally, so as to be a success?

ANSWER.—I don't remember to what disappointments I referred—possibly it was that in some cases I didn't get as great results in surplus as I expected. I never tried the plan you mention, but I think it will work all right providing swarms are not more than a day or so apart. There will be no trouble about the bees entering.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

A Bald Proposition.

Dr. C. C. Miller generally propounds questions the solution to which necessitates the evolution of great chunks of wisdom. The answer, however, to your question on page 240, is perfectly easy and natural, dear Doctor. The brainy "gray matter" inside some people's heads is so abundant and active that it forces all obstacles off the track, as it were! This is beyond doubt the correct answer to Bro. Miller's question, "How to prevent our heads growing through our hair." Cure? Enlarge your surroundings to accommodate the growth of that witty "top-piece." Catch on?

Charge? Oh, no: just make it *four* sections of your best white honey, and call it square.

A Question About the Hearing.

The following question was received, to be answered in this department of the BEE JOURNAL:

My hearing has been getting a little dull for the past 15 or 20 years. I'm not as young as I once was, but still I'm not hurt with old age, and when I go out to tea or to a quilting I like to hear what is said about my neighbors. A man that advertises to cure deafness, writes that if I send him $5.00, in two months he can make me hear as sharp as when I was a girl. Doctor, would you send him the money?

I like what you write better than so much about bees.

When the hearing begins to go, is it bound to go, like the sight, or can anything be done?

Put your answer in the AMERICAN BEE JOURNAL, but you needn't mind about giving my name.

Dr. Peiro very much deplores that the lady asking the question cannot well hear all the interesting tales of her gentle neighbors, because she must miss lots of fun; but only a thorough, personal examination could enable me to give a reliable opinion as to what can be done in her case. The hearing is not *bound* to go; indeed, it is often curable, but the difficulty must be absolutely known and removed. She had better keep that $5.00. Any one who promises a cure under the circumstances

stated, without seeing the patient, is a Whatyoumaycallhim, and the truth is not in him!

Rhubarb and Honey.

Another most excellent vegetable that should be grown in your garden—since it can be had so easily—is rhubarb, or "pie-plant." I do not recall another vegetable that is so useful, and so pleasant in a hundred instances. Nothing can be more healthy or enjoyable than pie-plant stewed with honey. The children love it, liberally spread on their big slices of bread! Incidentally, you save your butter. It not only tastes good, and nourishes well, but it is excellent to keep the stomach and bowels in natural condition. Jelly made of it rivals that made from currants or crab. By all means, can lots of it for winter's supply. Set out big roots this fall for next year's use.

Indeed, I look upon "pie-plant" as the poor man's orchard. It possesses all the good qualities of the fruits, beside some special merits of its own. When I visit farmers—I may come to take tea with you some day—and do not find plenty of this excellent vegetable in the garden, I know there is something wrong with their judgment.

Horse-Radish and Red-Pepper.

Another serviceable plant I commend is horse-radish, planted in some rich but out-of-the-way corner, where it won't run into more reserved ground. It is oftentimes very useful; quite as much for its leaves as its roots. They are a very handy and effective application to many forms of aches and pains. A pleurisy in the side is often stopped by applying a leaf wilted in hot vinegar. It acts much like a mustard plaster, but not severely. A poultice of it over rheumatic joints alleviates pain, and sometimes cures.

For headache over the forehead, a wilted leaf is very grateful. The root ground up fine and corked tight in a bottle with a little alcohol to keep it, makes excellent "smelling salts" for headache or fainting "spells." The leaves should be gathered just before the seed-stalk forms, and should be carefully dried *in the shade* between sheets of greased wrapping-paper, to preserve their essential oil, and pressed in a big book to keep their shape, then put away in some convenient place, and used in the manner explained, when needed. In this way you always have "mustard plasters" ready. When put on a patient, they should be covered with paper to prevent evaporation.

Be sure to raise some red-peppers. When you sprinkle a few seeds on a mustard draft, it makes it "take hold" at once. Besides, a little piece of pepper held against an aching tooth, right over the gum, often stops the pain.

The "Bee Journal" Pays.—Here is what one of our Ohio advertisers wrote us on Aug. 22nd:

MESSRS. GEO. W. YORK & CO.

GENTLEMEN:—Please discontinue our advertisement in the AMERICAN BEE JOURNAL, as we are crowded with orders at present so that we are unable to send queens by return mail, but will be up in about ten days. Orders are coming in 50 and 75 daily. That much for advertising in the AMERICAN BEE JOURNAL.

We are yours for success.

QUEEN-DEALERS.

N. B.—We will advertise again in a few weeks. Q.-D.

Comment on the above is unnecessary, though we might say, if you have anything to sell to bee-keepers, "Go, thou, and do likewise."

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 285 for advertising offer.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Melons by the Wagonload.

This looks like the Paradise of the world now. Great herds of fat cattle—good beef at 4 cents per pound; pastures like a wheat field, and gardens with great loads of vegetables. We are hauling wagonloads of water-melons to our hogs, and the bees are working like May. JENNIE ATCHLEY.

Beeville, Tex., Aug. 25.

Bees in a Court House.

A sheriff in a neighboring county has been trying to rid his county house of bees for some time. After several unsuccessful attempts by so-called bee-men, to take the bees out, and each time they being driven away with big noses, showing they had the worst of the fight, the "Bee-Hivers" were sent for (this is the name Willie and Charlie go by), and people gathered around that court house like a circus crowd, to see Willie get stung. But, alas, the "bee-hivers" charmed the vicious hybrids with a Bingham "Doctor" smoker the first thing, and then "went into them" without veil, gloves, or any more smoke, with their sleeves rolled up, and took out 80 pounds of nice honey from one colony that had occupied that court house 10 years.

There had been 5 colonies in the court house cornice, but the last July hot wave "got away with" all but the old tough one. The boys around town caught gallons of dripping honey from the melted combs, and the honey ran on the ground for several yards around.

Well, that people now sure enough believe that Willie is a bee-charmer, when the only secret lies in *knowing how.*

Willie took out all the honey, transferred the brood-combs into frames, put the bees into an 8-frame hive, gave the people honey to eat, and drove off home with his treasure, as happy as a boy could well be, wishing he had a hundred such court houses to rob.

We left a lot of empty hives at a neighbor's on the road, and, when we went after them, bees had taken up lodging in one of them.

We cut one bee-tree last week, and took out 75 pounds of nice, white honey, that we sold at 10 cents per pound, besides putting plenty in the hive for the bees. They were Italians, only 5 miles from home. How does this sound for a bee-tree in south Texas?

JENNIE ATCHLEY.

Those "Moth-Worms."

Dr. Miller gives me a good "send off" on moth-worms. Yes, I am the guilty party, Doctor. The compositor put it just as the "copy" read. I know that a moth is a winged insect, but what was that winged insect before it could fly? I think it was a worm and while in this worm state is when it gets in its best licks, as it seems to care but little what it eats. But it *must* have something to enable it to spin its silken house, and will eat wood, beeswax, honey-comb, or almost anything, and acts much like the moth that gets in our clothes, sometimes, when kept in trunks for awhile, and I think they are properly called moth, for they do corrupt and destroy whatever they infest. JENNIE ATCHLEY.

Another Fine Honey Country.

MRS. ATCHLEY:—We are still extracting, and will have a crop of 10 tons. The yield is nearly 100 pounds per colony. R. C. AIKIN.

Loveland, Colo., Aug. 20.

Experience With Bees—Troubled by Yellow Jackets.

MRS. ATCHLEY:—I came to Texas in 1859, and started with 10 colonies of bees, and increased them to 60 the next fall. I had one colony to winter between two scantlings, with a board for roof. I took pity on them and gave them a home. We hear so such about chaff cushions, etc., for wintering bees, that we can hardly realize it, as we never need anything but single-walled hives in Texas.

My bees did well before the War, but

during that bloody conflict I lost them all. In 1880 I again began with 8 colonies. I had them in all kinds of gums, logs and boxes, and I got the 8-frame Langstroth hives and transferred 16. I began transferring in June, and they are all doing well. I introduced 16 Italian queeens, and lost none. I have some of the nicest yellow bees I ever saw; they are so easy to handle. I had one black colony that was so bad that I had to leave home after I robbed it; and after I put in the 5-banded queen, and her bees came in, I could handle them without veil or gloves, and with but little smoke.

I undertook to rear my own queens, and made two colonies queenless, and they started 20 cells, and just before they hatched I gave them to queenless colonies, and they tore them all down. I went to a neighbor and got more cells, and they destroyed them also. I think the weather was too dry, and as they were not gathering any honey, they ate the cells for a change, so I got queens and gave them, and then they were all O. K. I will try the experiment again, and see how I succeed.

I wish you would tell me how to keep yellow jackets from bothering bees. They go right in and ask the bees no odds. I kill them by the hundred, but they get worse.

I am glad when each number of the AMERICAN BEE JOURNAL comes. I profit and delight so much in reading "In Sunny Southland." I trust you may continue to write. JOHN CAIRNS.

Chriesman, Tex.

Brother C., I am glad to make your acquaintance, and I may be able to assist you in bee-keeping. But I am unable to help you out on the yellow jackets, as there are none here that bother bees, and I never had any trouble with them. Possibly some of our readers can help you out.

Thanks for kind words about "In Sunny Southland." I will do what I can to make it interesting.

JENNIE ATCHLEY.

Profitable Bee-Keeping, by Mrs. Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

Disposing of the Honey Crop.

Query 939.—Having secured a good crop of honey, in what ways can the bee-keeper realize the most money from its sale? Or, what has proven best for you?—Missouri.

Home market, well advertised.—DADANT & SON.

Selling to large retailers, direct.—J. H. LARRABEE.

Sell it just as near home as possible.—EUGENE SECOR.

Sell it myself, in a home market.—MRS. L. HARRISON.

If you have time, retail it yourself, or sell to retailers.—E. FRANCE.

By working as much off as possible in a near market.—J. P. H. BROWN.

Very neat preparation for market. Make it look inviting.—A. J. COOK.

My home market has proven the most lucrative with me.—J. M. HAMBAUGH.

Much depends upon circumstances. Look out for your home market first.—C. C. MILLER.

Sell at home as much as possible, and that remaining ship on commission.—G. M. DOOLITTLE.

I have never kept bees for a honey crop. So I can give no light on the subject.—J. E. POND.

Sell all you can get as near home as you can find a market. That has been the best plan for me.—C. H. DIBBERN.

That depends upon the bee-keeper. I can realize most money by selling to the consumer, but prefer to sell to the retailer.—J. A. GREEN.

The home market has always proven the best for me, for a quantity of a ton or under. For larger amounts I have had to ship to larger city markets.—H. D. CUTTING.

I have never had any trouble in selling honey if it was in an attractive shape; and in case of extracted honey, in neat packages, but it must be cheap.—JAS. A. STONE.

Selling it directly to consumers in and about his own locality, if he is in any degree adapted to that kind of business, and if he isn't, he should employ some one that is.—R. L. TAYLOR.

Grade carefully, and put it up in attractive style, and leave it to be sold. You fix the price, and receive your pay after the sale, allowing the dealer a commission. A home market is always preferable.—MRS. J. N. HEATER.

Much depends upon circumstances, and the size of the crop. What would pay best in one case would not in another. I have always been able to dispose of my honey at home, and mostly at retail. For me, that is most profitable.—M. MAHIN.

If one likes the business of peddling, he can frequently realize enough above wholesale rates to more than pay them for his time while retailing his crop. I have done some peddling myself, but generally have sold the larger part of mine in bulk.—S. I. FREEBORN.

Sell it at retail among your village customers. Work up a regular route of your own. Sell, also, if you have them, eggs, butter, vegetables, and the like. Much better prices can thus be obtained. If your crop is larger than you can thus handle, ship to some *reliable* commission firm in the nearest city.—W. M. BARNUM.

By selling in your home market. This has always been my best way to get the most money for my honey, and sell direct to the consumers. But if you have no home market, the next best thing is to sell through a reliable commission house. This is a big question, and not space enough here to talk it up. —MRS. JENNIE ATCHLEY.

Make a market for it at home by educating the people whom he meets every day to use it, not as an occasional delicacy, but three meals a day every day in the week. This, of course, requires a man or woman who knows how to *talk*. If you do not know how, you should learn. You cannot do it? Then I give it up, unless you hire some one who can. —EMERSON T. ABBOTT.

It has proven best for us to wholesale it, and let those in the retail business sell to consumers. Our home trade to customers who come to the door for it, usually take from 2,000 to 3,000 pounds. This particular branch of the retail trade we will hold on to. The bee-keeper must be governed by circumstances. In many localities the retail trade is best, decidedly.—P. H. ELWOOD.

I could not answer your question in as few words as I have room for in this limited space. It depends upon where your are situated. I have a good home market which will take 1,000 or 2,000 pounds of honey. It has been built up from a little start of less than 100 pounds in a season. The rest of my crop goes to the city. I have a friend who peddles his crop from a spring wagon. Just simply use your talents to the best advantage.—G. W. DEMAREE.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Oct. 1.—Southern Minnesota, at Winona.
E. C. Cornell, Sec., Winona, Minn.

Oct. 4.—Utah, at Salt Lake City, Utah.
Jno. C. Swaner, Sec., Salt Lake City, Utah

Oct. 10-12.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.

Sept. 11-13.—Nebraska State, at Lincoln.
L. D. Stilson, Sec., York, Nebr.

Sept. 15.—S. E. Kansas, at Bronson, Kan.
J. C. Balch, Sec., Bronson, Kans.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ **In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

☞ "I like the BEE JOURNAL very much. I like its tone. I like its fairness, and its truthfulness."—Rev. S. G. Oglesby, of Alabama, March 21, 1894.

NON-SWARMING—MIGRATORY BEE-KEEPING.

BY JOHN M'ARTHUR.

In perusing the columns of our several bee-papers, as they come to hand, it occurs to me the question of non-swarming has taken possession of the minds of many bee-keepers in the northern part of this continent. Many are the devices and plans recommended. No doubt some of the plans will be of great service to many. The devices—what I have seen of them—referring to the Langdon device—is good for smothering bees, and preventing large surplus yields; possibly it may be improved, and be a success.

Considering the depressed condition of our honey markets, and condition of the industry in general, I think the present a very inopportune time to invest in nostrums and useless appendages which may be seen rotting and wasting in every bee-yard you visit. The rule with the writer has always been to run the bees with as few traps as possible. The simpler the method with the least handling of bees at any season of the year, will bring the best results.

From the valuable articles that are appearing from time to time, I think it possible that something may be gleaned that will solve the problem of non-swarming. It is something like the introducing of queens—no definite rule can be laid down, governing the question. As far as my experience goes, swarming gives me no trouble, and has not in the last 15 years, being quite within the mark when I say that 15 swarms would be the limit in that number of years. Many are the bee-keepers who ask the question, "How on earth do you prevent them?"

No doubt many reading the above statement will ask the same question, and look for an answer, which will be given in few words.

If it will be of any service to my fellow bee-keepers, the observations and experiences of the writer will be freely given; the dimensions of hives in use, and the rules that govern proceedings.

In considering the question of non-swarming, I would say that after 15 years of close observation and practice, there is no reason why any bee-keeper should not be able to control swarming without the aid of non-swarming devices, or cutting out queen-cells, or quarrying in the brood-chamber. Simply a brood-chamber of proper capacity, studying the flora of the locality, observing closely the working forces of each colony, and being able to read your apiary from external observation, as you would a book.

The hive or brood-chamber—what shall the dimensions be? There is no given rule, and cannot be, because localities are so varied. Also the productiveness of queens, like a farmer building a barn, or an artisan a house—the barn is built according to the size of the farm and products thereof, and the house according to

the size of lot and the means to build and maintain it. Every bee-keeper must therefore be a rule unto himself, according to conditions and surroundings.

The hive I use for extracted honey is the old Jones hive, inside dimensions measuring 3,240 cubic inches. For my locality and surroundings it is non-swarming, also labor-saving, because it contains sufficient stores in the brood-chamber to winter any colony at all times, which is considerable if the apiary is extensive. What a comfort to know your bees won't swarm! And when the season closes, feel assured your bees have sufficient to winter! These are two great items in bee-keeping.

Many of these hives in the heat of the honey-flow will have four and five supers on top of the brood-chamber, the super being the same as the brood-chamber of the hive in use for comb honey, measuring 2,592 cubic inches, and now report the same success with comb honey—no swarms, with an average of 84 pounds per colony for several seasons.

Considering the productiveness of queens, some cannot do more than keep an 8-frame Langstroth hive filled with eggs and brood. A poor locality or season is sometimes the cause of this, while some queens will fill two 8-frame hives. Then study the queen's egg-capacity, and accommodate her accordingly. Weed out all bad queens. Sometimes a queen doesn't come to her best until the second season. Having on several occasions determined to destroy such, I repented, and found them extra the second year.

Have drones flying from colonies that do the best, selecting such colonies for queen-rearing, and you will soon breed them up to the standard of excellence.

In many localities, after fruit-bloom, there is a period of ten or more days that there is no secretion of nectar or bloom of any kind to be found. At this period the bees become fat and lazy; the young bees having nothing to do, often ball their queens, and start queen-cells. The queen not being so abundantly fed, eases off in laying, and before clover comes in bloom the bees have the swarming-fever; their usefulness is gone until a swarm issues. In such localities, feeding may be resorted to with good effect. Where there is a perpetual flow right along until the end of the season, swarming is more easily controlled. Put on supers for surplus as soon as they begin to show signs of new comb on top of the frames of the brood-chamber; double up all weak or middling colonies, if it is honey you want; for in unity there is strength—two will always accomplish more than one; trying always to have all, or as many as possible, in comdition for the first harvest, which, in this locality, is from maple, willow, dandelion and fruit-bloom; securing a surplus from this source means a very large surplus at the end of the season. For as backward as the season was last year, my first comb honey was put on the market on June 10th. To accomplish this, means bees of proper age, and plenty of them. To secure this, means good queens, and well-wintered bees, with great spring care, shelter and packing—especially top-packing. A super filled with cork or cedar sawdust, is the best with air-tight dummies; contracting the brood-chamber to the extent of the bees and brood then in the hive, letting well enough alone until you see evidence of crowding at the entrance of the hive, when you may add one or more frames to suit the requirements of the colony. There is nothing that will encourage early breeding in spring equal to new pollen.

Let the above rules guide you whether for comb or extracted honey—depend upon it, your efforts will be crowned with success.

Migratory Bee-Keeping.—A few words on migratory bee-keeping, and I have done. The question often arose, in my mind—Would it not be cheaper, and no risk in wintering, nor trouble from spring dwindling, to destroy our bees in the fall and

convert everything into cash, and move them from the South to the North to gather our harvest? Let us see how it may be done.

A colony of bees will consume, from the end of August until the following June, 40 pounds of honey—at 7 cents, $2.80. Converting the combs into wax—2 pounds—50 cents; or the combs may be preserved at say 80 cents; possibly the queen and bees may be sold at say 50 cents—or the total, $3.80, may be realized per hive—saving trouble and risk of wintering. Bringing them through the spring has been the greatest trouble the past three seasons, owing to continued cold weather. No doubt many will be averse to any such proceeding, and will denounce it and declare it impracticable and unprofitable, which is not the case.

The spring of 1893 was one long to be remembered as one of the most disastrous in the loss of bees in the northern part of this continent. Before they could be gotten into condition to gather the crop, the season was nearly gone—at least a portion of the clover crop was required to get them into condition, when fruit-blossom in ordinary seasons would have sufficed.

Bees imported from Tennessee, or some such clime, can be laid down by May 10th, stronger in bees and brood, and more uniform than ours would be on June 10th, therefore in a condition to secure surplus from our earliest blossoms, yield being as large from that source as any, if we have the bees to gather it.

If the bees imported in 1893 be a fair criterion of what they can do, then I say a bee-keeper would be money in pocket by following the above plan. The time was when I would not advocate such measures; it has now arrived—a living has to be made out of the business; we have, then, to look at it from a business point of view, laying aside sentiment. Some will say, "What a cruel thing to kill the busy bee!" That is so; is it not equally so to kill the calf for its veal? If we were strict vegetarians, we might talk in that manner. The writer is a vegetarian, and never passes the shambles without an uneasy feeling lest he should see the shuddering body of the bullock in the last throes of death. One thing I know is, that I can take the life of a bee with less compunction than I could a calf.

From experience and observation, I have arrived at this conclusion, that it is the more profitable method, having brought a carload of bees from Tennessee in June, 1893, as an experiment, arriving in Toronto on June 13th—one month late. It would have been better had they arrived one month earlier, as the weather would have been cooler, and more favorable for them. They were in transit six days, the weather being very warm at that period, requiring constant attention, spraying the bees, sides and roof of the car to keep them cool. They were so strong in bees that before they arrived they nearly exhausted their stores. Each colony contained six pounds or more of bees, and six frames of brood. Any practical bee-keeper would know what that would mean, to have 200 colonies in that condition on May 20th, in the northern part of this continent. It just means that enough surplus would be gathered from early blossoms to meet all expenses, and have a larger surplus for the balance of the season, besides solving the wintering problem. They arrived in good condition, and I can report favorably on the project. In all likelihood I will repeat it. The loss in transit was two colonies.

I hope these few scattered thoughts may be the means of conveying to the minds of some of the BEE JOURNAL's many readers, some facts that may be helpful in reducing labor, risk and expense in their apiaries. Toronto, Ont., Canada.

☞ To me, it seems that the matter of good drones is of greater value, if possible, than is that of good queens; for I believe that the father has as much, or more to do with the impress left on the offspring, than does the mother.—*Doolittle.*

BRACE-COMBS AND "BEE-HIVES."

BY H. E. HILL.

Editorially, the June *Review* says: "Those using flat hive-covers placed bee-space above the frames and resting upon the upper edge of the hive, know how such covers are stuck fast with propolis, and how, unless honey-boards are used, brace-combs are built againt the covers;" and proceeds to explain a method for removing said covers without lifting the brood-frames. Now, nothing is more certain than if "those using flat covers" do encounter this difficulty, they are also "using" faulty top-bars in connection therewith.

I know a man who has used flat covers for 15 years, and who does not recollect having seen a brace-comb between the top-bars and the cover. Instead of devising to tear a flat lid, which has been tied down with brace-combs, without crushing bees and disarranging the frames, just try top-bars 1 1/16 or 1⅛x¾, planed on top and sides, and spaced 1¼ inches from center to center, with a 5-16 space above, and if a brace-comb is ever found attached to the cover or to the honey-board, kindly advise the writer, that he "may note it in his journal."

AN EXPERIENCE WITH SO-CALLED "HIVES."

It is indeed questionable whether the designers of some of the so-called "bee-hives" which are imposed upon the inexperienced by some of our extensive manufacturers, ever manipulated a hive containing bees, as their wares are incontrovertible evidence of total ignorance of the requirements of a hive that conforms to the nature of the bee, and consequent ease of manipulation. Consistency demands of such concerns that they add to their stock, and catalogue, as accessories, crowbars, jackscrews and torpedos.

On one occasion, most memorable, I was detailed by my employer, to take off 800 or 900 comb honey supers from such "hives"—the product of a Western manufactory. The sections were supported by fragile slats of wood running lengthwise of the super. The brood-frames had top-bars ⅜x¾, interspersed with those of the V variety, apparently as an extra inducement to brace-comb building, in addition to the warping and sagging of slats and ⅜ top-bars.

About 1,000 of these hives were then doing service for their second season, but the supers clung to the top-bars with a "deathlike grip," so that a small crowbar was necessary to start them, and each one dragged with it from one to ten brood-frames. The supers were then inverted upon the ground, and the frames pried off separately and replaced in the hive. Bees were killed by the thousands by forcing uneven and bulged combs up with the supers. Everything was drabbled with honey, even the wheelbarrow, and bushels of brace-combs were scraped from the frames and super slats.

The time occupied in removing 50 of these supers would have been ample to take off the whole lot, to say nothing of the mortification and disgust incurred by attempting to work with such "traps." Narrow, thin, and V-shaped top-bars are still in use in some of the large apiaries, for some unaccountable reason, though I know of no one of experience who is making additions to his grief by extending the number already in use.

Uniform frames having top-bars as above described, nailed squarely together, resting upon a metal bearing, having accurate bee-spaces above, below, between, and at the ends, with full sheets of foundation supported by wires, and a level stand for the hive, positively puts an end to all brace-comb annoyance for all time.

Titusville, Pa., Aug. 9.

HONEY-BEES AND HORTICULTURE.

BY H. C. FINNEY.

The honey-bee is made the scape-goat for a good many ills that horticulture is heir to, as well as depredations from the numerous and natural enemies of fruit. The honey-bee is one of the greatest benefactors and friends the horticulturist has, fertilizing bloom that would otherwise remain unfertilized. It has been frequently and fully demonstrated that in districts where there were large orchards unvisited by the honey-bee, they were much less productive than orchards in close proximity to an apiary, all other conditions being equal. In a Massachsetts town, some years ago, a number of citizens petitioned the council for an ordinance prohibiting the keeping of bees within the city limits, because they sucked the honey from the bloom, causing injury to the full and perfect development of the fruit. The prayer was granted, and the bee had to go. Result: The next year the orchards were filled with bloom. The wise ones predicted an unprecedented crop, now that the bee was disposed of. Harvest time came, but there was less of fruit by half than in the preceding years. Year followed year of almost failure, then the cry went up, "Bring back the bees!"

Nearly every community has some victim who has suffered pecuniarily from the ravages of the honey-bee! Birds, grasshoppers, nor insects ever molest; they have a sort of tender regard for his feelings, and his ripening fruits, in fact, are never seen, could not be enticed to partake, no, sir; but the accursed honey-bee (perhaps an offspring of that Massachusetts bee) swoops down upon his vineyard, scores and lacerates, bites and tears the ripe clusters from bottom to top, leaving them a bleeding mass for wasps and thrips to gorge upon! He relates his woes and losses to sympathizing friends, and they condole with him in his misfortune, and pass resolutions to the effect that the bee is a mighty mean animal, and the man who keeps him is a worse one, and ought to be prosecuted for maintaining a nuisance!

Now, for the facts: It has been repeatedly demonstrated that it is impossible for a honey-bee to puncture a smooth-skin fruit, and any one who will take the trouble to examine the structure of one, can satisfy himself of the absurdity of the thing. Experiments have been made all over Europe, as well as this country, and as yet not a single case has been found where the honey-bee punctured the fruit. Yes, sir, they will eat or suck the fruit after it has been punctured by wasps or thrips, but not before. I have a little experimental station of my own, and invite all who feel disposed to visit it, and satisfy themselves in this matter of fruit-eating.

To make a practical test of the theory of puncturing fruit, I selected bunches of the ripest and sweetest grapes, placed them on the frames over the brood-chamber in the hives where the bees could have free access to them. This was three weeks ago. The grapes are there to-day, and untouched. The bees run over them, but pay no more attention to them than they would to so many marbles. I will guarantee any one immunity from stings who may wish to verify this statement, and satisfy himself.

There are several brother bee-keepers in this vicinity who have been to considerable expense trying to build up an industry that will partially fill a long felt want, viz.: A pure article of honey, both comb and extracted. It is an industry that should be encouraged instead of discouraged. Apiculture and horticulture should go hand in hand; the field is large and inviting, and by attention and energy will return fair profits. I have heard the honey-bee maligned and misrepresented, so wrongfully accused of mischief that belonged elsewhere, that I raise my voice in its defense, and in behalf of my brother bee-keepers.

Council Grove, Kans

A BEE-MAN'S FRIENDLY CHAT.

BY J. A. GOLDEN.

FRIEND YORK:—I use the word "Friend" because there is no word in the English language that seems to be clothed with so much love to our fellow man as the word *friend*, notwithstanding there appears to be quite a hesitancy with some bee-keepers to use the phrase, rather intimating that its use implies deception. Let this be as it may, when I receive a communication from any source commencing with the word "Friend," it instantaneously thrills my whole nature with a love of friendship to the individual.

Thanks for the sample copy of the AMERICAN BEE JOURNAL, which we received from you a few days ago, of Aug. 9, 1894, which we read and appreciated, and we congratulate you in publishing so *bright* and *terse* a weekly journal—in fact, as a weekly, and containing such information as the copy you sent me, it is the best journal for beginners in bee-keeping that I have read; and so long as it keeps from long discussions by experts on topics of advanced bee-culture, it will surely meet the wants of thousands of bee-keepers who are never heard of as writers or theorists; however, many of them possessing a practical knowledge of successful bee-keeping that would put to shame many a theorist's logic, if placed side by side. And while we greatly appreciate the writings of our most eminent and learned men in apiculture, there are very many that censure some of our bee-papers for giving so much space to a few expert writers on certain topics, forgetting that this is a progressive age in bee-culture, as well as other callings.

We cannot see why the AMERICAN BEE JOURNAL should not find a place in every bee-keeper's home (who is able to take it), with its valuable information in its different departments, and giving extracts of many useful hints from other journals that are real money to many a novice in apiculture.

ISSUING OF SWARMS.—I notice on page 171, that Dr. Miller, in answer to Question No. 3, says the swarm always issues before the young queen hatches out. We admit that this is usually the case, but not always, for I have had two cases come under my observation where the queen hatched in one case some three days before the swarm issued, and the other was noticed running over the combs when transferring the *combs* to hive the swarm on the old stand.

BEE-PARALYSIS.—The article on page 178, by "Novice," is very misleading so far as a more northern climate is concerned, as regards bee-paralysis, where he says the only correct method is to destroy *bees*, *comb* and *hives*. The *sodium* cure, properly administered, will cure the worst form of paralysis, so far as this climate is concerned. So don't destroy the bees. We can furnish positive proof to the above cure.

We say "Amen" to his suggestion as to purchasing diseased bees or queens. I was making it a specialty in rearing queens when the disease made its appearance at the house-apiary, and we refused to send out any more queens. We now challenge all beedom to produce brighter and healthier bees than we can here at the house-apiary. We publicly predicted, some two or three years ago, that unless apiculturists succeeded in stamping out the so-called paralysis, that many apiarists would have to look for some other pursuit for their bread and butter; and it seems as though California and the Southern States will verify the prediction, according to reports.

Success to the AMERICAN BEE JOURNAL, under its new editor.

Reinersville, O., Aug. 20.

VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

REMEDY FOR SWARMING.—Mrs. Atchley arouses my earnest expectation when on page 237 she promises to give a remedy for swarming. My expectations have been aroused in that direction a good many times, and just as often I've been disappointed. Guess I can stand one more disappointment.

UNSEALED CELLS.—The replies to the query on 238, show that it isn't by any means a settled question whether a colony will swarms or not when there is present a virgin queen and *unsealed* queen-cells. I suppose the meaning is that only unsealed queen-cells are present and no sealed cells. I think, however, that some who replied did not notice that feature. Otherwise Prof. Cook would hardly have said, "This is always the case where second swarms issue." For always sealed cells are present when second swarms issue, and it would be a rare thing to find any unsealed, I think. Others answer in much the same way. It is the practice of some to give a frame of unsealed brood to a colony having a virgin queen, or when it is not certain whether a virgin queen is present. In such case, if unsealed queen-cells are cherished, would not the impulse that made the bees continue such cells also make them start cells from young larvæ? The experiment stations might help us out also in this.

HONEY CONSUMED BY BEES, ETC.—Hasn't S. C. Markon, page 242, got things just a little mixed? He says, "What harvesting is to the farmer.....swarming is to the bee-keeper." That may be true if increase is what the bee-keeper is after, but nowadays it is not swarms so much as honey he is after. In many cases swarming lessens the chance for a harvest of honey.

His idea that he can double the number of his colonies without sacrificing any of his surplus honey is not the idea of bee-keepers generally in his State, I think.

He touches on one point on which I wish he would give us more light if he has been experimenting. He says, "gathering perhaps five or six fold their own consumption." How much honey does a colony use for its own consumption? I am not sure that I ever saw any estimate except one from Doolittle, and I think he estimated that a colony consumed at least 60 pounds of honey in a year. If bees gather "five fold their own consumption," then out of every five pounds gathered one pound is for their own consumption and four for surplus. In other words, they consume ¼ as much as they store for surplus. If, then, 50 pounds be the average surplus, the amount used for the bees' own consumption is ¼ of that, or 12½ pounds. 12½ differs a good deal from Doolittle's 60. Which is right?

SHADE IN THE APIARY.—I don't know whether I have the right answer to the conundrum Friend Barnum fires at me on page 243. A little depends on the object of the shade. I want it for the benefit of the operator rather than for the bees. With plenty of chance for free circulation of air about the hives, I'm not so sure that shade is often needed for the bees in northern Illinois. The present season has probably been the worst I every experienced in this regard. The thermometer ran up to 100° or more, and in a few cases where hives stood unprotected in the burning sun, foundation dropped in the sections. Whether this would have been the case if the bees had been working in the sections, I have some little doubt. I would sooner risk hives in the broiling sun, with free chance for the breeze, than in a dense shade in a close place. I've had brood-combs melt down and the honey run out on the ground with hives standing under the shade of trees so dense that the sun never shone on them all day long. But a heavy stand of corn shut out the air

Where it can be had, I don't know of any shade that suits me so well to work under as the shade of trees. If I were out on an open plain, I think I should set posts and make a roof of boughs or boards, having it high enough to walk under without stooping.

REPORTING CONVENTIONS.—I wonder if Secretary Knoll will take it kindly if I make his report on page 251 the text for a very short sermon to secretaries in general. For I think he makes the same mistake that most of convention secretaries do in not discriminating between proper matters for record and proper matters for report in a bee-paper, and he's no worse than others. As Secretary, he should record in his book all matters that will be needed at future meetings, and in his printed report only the things that will be of interest to bee-keepers outside of the society.

In the present report, the first paragraph is proper for both. Then, "Minutes of last meeting were read and adopted as read." All right to enter in the Secretary's book, but what bee-keeper outside the membership cares a fig whether the minutes were adopted as read, or adopted with corrections, or not adopted at all?

"89 colonies represented" interests us all.

40 cents paid for a book, and a committee appointed—that's a matter of business important to be entered in the book, but I'd a good deal rather the editor would leave white paper in its place in my copy of the journal.

Next comes the announcement of a practical question in apiculture to be discussed, and I prick up my ears with interest to hear the discussion. That's the heart and soul of a convention—its discussions of practical questions. But, as usual, I am entirely disappointed, for not a word is given except the question, and the statement that several answered it, and the reader is left utterly in the dark as to what those answers were.

Now let the good secretaries and reporters please bear in mind that the bee-talk is what we want. Give all the ideas in condensed form if possible, and don't send for publication matters that are of interest only to the society reported. Put these latter in the secretary's book, in which it is not necessary to write the discussions, for, if published, the printed report can be pasted in the book.

Marengo, Ill.

[For editorial remarks on the foregoing, see page 295.—EDITOR.]

ITALIAN BEES—HISTORICAL FACTS.

Was S. B. Parsons Dishonest?

BY M. M. BALDRIDGE.

On pages 118, 119 and 120 of the BEE JOURNAL, are over five columns of what purports to be historical facts in regard to the early importation of Italian bees from Italy to the United States. The article is written by C. J. Robinson, the historian, and will in due time be found, as I anticipated, simply a symposium of unreliable statements! It contains in fact so many erroneous allegations that I shall not try at this time to reply to them all, but will confine my remarks mainly to the following statement:

Mr. Parsons was dishonest. In fact the word "*dishonest* only expresses a faint idea of the case when the facts are known."

Now, why does Mr. Robinson charge Mr. Parsons with dishonesty? The charge is based mainly, so it seems to me, upon the following allegations: That Mr. P. was commissioned by the Chief of the United States Patent Office to purchase, in

1859, a few colonies of Italian bees in Italy, and to ship them to Washington, to the agricultural department, for especial purpose; that Mr. P. purchased the said bees, but, instead of shipping them "to their proper destination," they were taken to Mr. Parson's home, in Flushing, near New York city; that the cost to the United States Treasury was about $1,800; and that nothing was got out of the enterprise by the United States Government in return for said investment. That is, I think, substantially Mr. Robinson's "bill of complaint."

Now, I admit that said charges, as given by Mr. R., and without a full and proper explanation, have the appearance of something wrong on the part of Mr. Parsons, but when all the facts are made public, everybody, Mr. Robinson included, will see that no wrong was done to the United States, and that the charge of dishonesty is a false one. It will then be understood why Mr. Langstroth, of whom Mr. R. complains also, has given Mr. Parsons full credit for the first importation of Italian bees from their native land, and none worth mentioning to the United States Government.

On page 624 of the BEE JOURNAL for May 17, 1894, I stated that the United States did not pay Mr. Parsons $1,800 to defray the expenses of importing Italian bees; nor not even one-tenth of that sum, which would be $180. I will now state that the United States did not pay Mr. Parsons for said purpose the one-hundredth part of $1,800, which would be $18. Nor in fact not even the sum of $1—*simply one solitary dollar!* And I defy Mr. Robinson, or any one else, to record any proof to the contrary. No such proof has been, or can be found among the records in the archives of the United States Treasury Department, nor among the "vouchers" on file there from Mr. Parsons. Simply assertions to the contrary, or lost letters, are not proof, by any means.

Mr. Robinson says, on page 120, that Mr. Langstroth has recorded that Mr. Parsons paid Mr. Hermann $1,200 for Italian bees. Mr. Robinson also says that said $1,200 "was money out of the United States Treasury, as shown by the indisputable history of the case." Now this is simply an assertion with no shadow of proof to sustain it. Mr. Langstroth has nowhere said, as intimated by Mr. Robinson, that said $1,200 "was money out of the United States Treasury;" nor that he believed it was United States money, for he knew better.

Mr. Robinson complains that I have misquoted him as follows: That the United States "paid about $1,800 for importing Italian bees, and got nothing in eturn." Mr. R. says: "I challenge him to refer to any record showing that I have made any such positive statement." It is not my purpose to misquote any one intentionally, nor do I think I have done so in this instance. Now here is verbatim what Mr. R. did record in the *American Bee-Keeper*, page 180, 1893:

"Dr. Riley did not mention the fact that it cost the United States Government some $1,800 to defray the expenses of the Government—Parsons' importation—but the records are in the archives of the Department, or should be there."

On page 178, same issue of the *American Bee-Keeper*, Mr. R. says that "none of the 20 hives reached Washington, the proper destination, but instead thereof, all of the hives were taken to Parson's residence, in Flushing, N. Y."

I think now that the average reader will conclude that I have complied with that harmless challenge. I think also that the average reader has got the impression from the past utterances of Mr. Robinson, that Mr. Parsons played the "green-goods game" upon Uncle Sam, and that Mr. R. has tried very hard, by his so-called historical facts, to instill that as a fact in the minds of bee-keeping readers.

Now let me add right here, in reply to the foregoing citation from the *American Bee-Keeper*, that Mr. Parsons did not purchase "20 hives" of Italian bees, nor did he take that number to his home, in Flushing, at the time Mr. R. refers. When Mr. R. writes history, he should confine himself to recorded facts, and not place too much confidence on an unreliable memory.

As it is 102° in the shade to-day, the foregoing must suffice for the present.

St. Charles, Ill.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Best Season He Ever Knew.

It has been the best season for honey here I ever knew. From June 12th up to the present time there have been but a very few poor honey-days. Bees are doing good business in the sections at this date. The honey is of a very fine quality. There are several acres of buckwheat near my bees, but they hardly notice it this year. We have had no dry weather here this season, and prospects for a fall crop of honey are good. I have bees 40 miles west (at Lunenburg, Vt.) that did very well there, but nothing since basswood—too dry there. W. H. YATES.

Bartlett, N. H.. Aug. 27.

A Reasonably Good Season.

The season here has been reasonably good for honey-gathering—with me, at least. I had 38 colonies of bees in fine condition at the commencement of swarming, increased to 80 colonies, and have up to date packed in crates 2,700 pounds of comb honey, and there is more on the hives to take off.

WM. L. BACKENSTO.

Ft. Logan, Colo., Aug. 27.

Northeastern Iowa—Big Chaff Box.

White clover was an entire failure here this season. Basswood yielded an extra quality of nectar, but not as abundantly as in some other seasons. I believe the linden is the only sure source of honey in the Northern States. In fact, I have never known it to fail in 15 years in any State I have been. No other plant or tree yields, or, as A. I. Root says, "begins to yield the quantity" that basswood does. Were I a honey prophet, I would never predict a failure of basswood secretion. My bees are gathering a little honey slowly from buckwheat at present.

Last fall I packed 11 colonies of bees in one long box, packing with chaff and forest leaves. It is one of the nicest ways to winter bees yet discovered, were it not for the fact that the bees are very much inclined to want to all enter one or two of the end entrances in the spring, leaving the middle colonies weak. Who knows a way to mark the entrance so that the bees will find their own doorway? I had one entrance painted white and the next one black but this seemed to make no material difference. I should think this would be an objection to bee-houses.

W. P. FAYLOR.

Updegraff, Iowa, Aug. 28.

Small Crop This Year.

The honey crop this year is small—500 pounds of white honey from 25 colonies, spring count. Last year I got 1,600 pounds from 10 colonies—two-thirds of it being white honey.

B. H. NEWLAND.

Melrose, Wis., Aug. 27.

Bees Did Fairly Well.

Allow me to report that bees did fairly well in this part of the country this year. The surplus came mostly from Alsike clover and basswood, the latter yielding more than the average. I am just a beginner in the bee-business, but I consider that *my* bees did extraordinarily well—two colonies storing 180 pounds of comb honey in sections, and increasing to 7 good, strong colonies.

JAS. E. HOLT.

Newton Robinson, Ont., Aug. 23.

Big Flow from Buckwheat, Etc.

My report for the season is as follows: I had my bees in good condition when the fruit-bloom came, but the weather was so cold and wet that they didn't make enough to live on, and I had to feed some of my best colonies. We lost the locust bloom, which is one of our main honey-trees. The white clover was "no good," but the bees worked well on the Alsike, but we haven't much of that here yet. I got no surplus from clover, but when the basswood came they made it count. Some colonies stored 40 pounds in 8 days. After that was done, the early buckwheat came in, and they have been piling in the honey.

I never had such a flow from buckwheat; some colonies have already filled 80 sections, and many of them have 2 and 3 cases of sections filled. One colony, hived on June 22nd, has stored 60 pounds of surplus.

If frost keeps off, buckwheat will last two weeks yet. The colony that I have on scales stores from 3 to 5 pounds per day. Some of my neighbor's bees are doing equally as well—others not doing much good; but those I have induced to take the AMERICAN BEE JOURNAL are having the best success. I don't see how a bee-keeper can do without it. I give many lessons verbally, instead of publishing them, to my bee-keeping friends in this county. G. W. BELL.

Bell's Landing, Pa., Aug. 23.

Drones-and-Queen Episode.

On Sunday, Aug. 19th, while seated among the shade-trees at the "Island Apiary," enjoying my lunch, I was startled by an unusual sound above my head, and in looking around to see from whence it proceeded, a cluster of several hundred drones dropped almost to the ground through the trees within eight feet of where I sat. A portion of the cluster broke away about 10 feet from the ground, the balance coming so low that the golden-rod and asters swayed with the commotion they made. It certainly was a free fight among the drones, proving true the old adage — "Faint heart never won fair lady." The queen would have none of them, and returned to her hive still a virgin.

JOHN MCARTHUR.

Toronto, Ont., Aug. 23.

Abundant Fall Bloom Expected.

My bees came through the last winter in fine condition, and did splendid work till the last half of June. The drouth struck us on June 14th, and our first rain came on August 19th. My 38 colonies had partly filled about 300 sections at that time, and have since finished about 100; and if nothing unforeseen happens, I will see all those finished, and many more by October 12th, as the prospect now is favorable for an abundant fall bloom, which will give me a better crop of honey than for the past two years. Last year was the poorest in many years here, but I am hopeful now.

My estimate now is about 800 pounds of comb honey for this year, which I think I will fully realize. I had 32 colonies, spring count, and had only 6 swarms, which is fewer swarms than I have ever had in one year, with a less number of colonies, and I conclude that bees are often wiser than their keepers in regard to their increase, especially in time of drouth, like this year and last.

I will report again next winter and tell how I came out.

B. F. BOULTINGHOUSE.

Rockport, Ind., Aug. 27.

Another Bee-Boy Heard From.

I saw Charlie Sanford's letter in the BEE JOURNAL some time ago, and I waited for responses before I wrote, but as I have waited two weeks and there are no answers yet, I thought I would write a little. I believe that more or less of the bee-keepers' children are bee-keepers themselves. I have a colony of Italians. The drouth has injured the honey crop so that there will be no surplus honey. It has not only injured the honey crop, but other crops as well. There will not be a half crop of corn in this part of the country. Success to the BEE JOURNAL. CLYDE BENNETT.

Walkersville, W. Va., Aug. 23.

May Get Plenty of Winter Stores.

It has been almost a total failure here, that is, as far as surplus honey is concerned, on account of the awful drouth; but I think my bees will get plenty of winter stores, and that is a good deal, considering everything.

I bought a select tested queen of one of our queen-breeders, and I introduced her. I left her 30 days in the hive, and couldn't find an egg then. So I sent to a Texas breeder for two queens, which I am well pleased with. They give very good satisfaction. After I had the first mentioned queen introduced 30 days and she didn't lay, I wrote the breeder about it, and the answer I got was, "If you expected me to replace her, you ought to have notified me sooner." But how could I notify before I had the matter tested? JNO. H. RUPP.

Washington, Kans., Aug. 27.

Basswood and Alsike Clover Honey.

I send you by express two one-pound sections of white or clear honey. Will you please examine it carefully, and let me know what it was gathered from. My bees had access to Alsike clover, and some white clover, also basswood. I

think the honey was gathered from all. Judging from reports from bee-keepers in the last BEE JOURNAL, my bees did very well this year. I took out 38 colonies from winter quarters, 6 very weak, and have a little over 1,000 pounds of white honey like the sample sent you, all in one-pound sections.

Lena, Ill., Aug. 28. A. S. CROTZER.

[Bro. Crotzer, the honey came all right, and is very fine indeed. The basswood flavor is so clear to the taste, and the rather "smooth" taste that it has we think is mainly owing to the Alsike clover in it. You should get a good price for such honey at any time, as it certainly is a superior article. Thank you for the two sections sent us. They will help us to "keep sweet."—EDITOR.]

Fine Flow from Boneset, Etc.

I got one super of honey from 18 colonies. White clover was a failure. The drouth in 1893 and cold weather in March, 1894, killed the clover. My bees are rolling in the honey now. We are going to have a fine honey-flow from boneset and smart-weed. I live near the Sangamon river bottoms, and there are hundreds of acres of boneset, which makes fine light honey, and of fine flavor.

I am selling fall honey at 15 cents per pound. My bees are all the five-banded, and are away ahead of black bees. They are gentle to handle, but will sting if not properly handled. I like to have bees stick to the frames or comb when handling them. I think if they stick to the combs they are pure stock. Am I right or not? I have had black queens to run off the combs and hide in the grass like quails. But if they had been quails, I could have found them with my Gorden setter, for I have a good one.

Riverton, Ill., Aug. 24.

☞ There is scarcely a spot on the surface of the earth where mankind finds sustenance, that will not, to some extent, support bees, although they may do much better in some localities than others.—*A. I. Root.*

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C F. MUTH & SON, cor. Freeman & Central avs.

Convention Notices.

UTAH.—The Utah bee-keepers will hold their semi-annual convention on the Oct. 4, 1894, at Salt Lake City, Utah. JNO. C. SWANER, Salt Lake City, Utah. Sec'y.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895. Madison, Wis. J. W. VANCE, Cor. Sec.

MINNESOTA.—The second meeting of the Southern Minnesota Bee-Keeprs' Association will be held at Winona, on October 1st, in the Board of Trade rooms, commencing at 10 o'clock a. m. E. C. CORNELL, Sec. Winona. Minn.

PENNSYLVANIA,—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec. Franklin, Pa.

THE NORTH AMERICAN B.-K. A.—The Quarter Centennial Meeting of this Society will be held at St. Joseph, Mo., on Oct. 10, 11 and 12, 1894. It is the first convention of the North American Association beyond the western bank of the Mississippi, and large delegations from the great West will be present. We hope the East, the North and the South will gather with them. FRANK BENTON, Sec. Dept. Agriculture, Washington, D. C.

NEBRASKA.—The next meeting of the Nebraska State Bee-Keepers' Association will be held at Lincoln. Neb., on the evenings of Sept. 11th, 12th and 13th, 1894, at the Honey Hall on the State Fair grounds, and in connection with the Bee and Honey Exhibit at the State Fair. An invitation is extended to every reader of the AMERICAN BEE JOURNAL to be present and sample the good things presented. York, Neb. L. D. STILSON, Sec

Have You Read page 253 yet?

Honey & Beeswax Market Quotations.

BUFFALO, N. Y., Aug. 17.—We quote: Strictly fancy one-pound comb honey 13@14c.; second quality, 8@12c. We will advance about 10 cents per pound on several tons of strictly fancy No. 1 comb at any time. It is rather early just now to sell much, but it will soon commence to sell freely. B. & Co.

NEW YORK, N. Y., Aug. 11.—Our market is well stocked with all kinds of extracted honey, and trade is quiet. We quote: White clover and basswood, 6@6¼c. a pound; Southern, 50@65c. per gallon, according to quality. A few lots of new comb honey arrived, but the trade on these goods has not opened as yet. In two weeks we will be able to make prices. Beeswax is quiet at 26½@27c.
H. B. & S.

CHICAGO, ILL., Aug. 23.—Choice lots of white comb honey are selling at 15c. per pound. The demand is not at all brisk. Extracted brings 5@7c., as quality, flavor and package warrants. As yet little dark comb is offered, and it does not sell at over 10c. Beeswax, 25c. R. A. B. & Co.

CHICAGO, ILL., July 28.—We have received a few shipments of new comb—fancy stock for which we obtained 16c. It is impossibe to advise shippers at this early date as to the disposition of their stock. We would advise, however, not to be too anxious to place their honey on this market until say the middle or last week of August. Owing to the severe hot weather and dull business at present, it would sell slow. We quote: Fancy comb, 16c.; No. 1, 15c. Extracted, 7c. Beeswax, 24c. J. A. L.

CINCINNATI, O., Aug. 9.—There is a slow demand for extracted honey at 4@6c. a pound on arrival, according to quality. Demand is good for comb honey at 13@15c. a pound, in the jobbing way, for choice white. Arrivals are insufficient.
Beeswax is in fair demand at 20@23c. for good to choice yellow. C. F. M. & S.

NEW YORK, N. Y., Aug. 23.—We have had a few inquiries for new comb honey; also have had some small shipments of new crop. Demand is as yet limited, but expect a good opening. The weather is too warm yet and the consumption is hardly begun yet. Prices now ruling would not be a criterion of what the prices will be when the season has fairly opened. We quote: 1-lb. clover—fancy, 14c.; fair, 12@13c.; mixed, 10@11c. Extracted is in better demand for manufacturing purposes. Southern, 50@60c. per gallon; Northern, 5@7c. per pound. Beeswax, 25@28c.
C. I. & B.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of last number of the BEE JOURNAL for description and prices.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1,40.

Advertisements.

"Bee-Keeping for Profit."

A New Revised edition of this valuable work **for only 25 cts.,** postpaid, will be sent by Geo. W. York & Co. or Dr. Tinker. It is full of the latest and most interesting points in the management of Bees, with illustrations of the Nonpareil Bee-Hive, Section Supers, Sections, Queen-Excluders, Drone-Traps and Queen-Traps, etc.; also beautiful direct prints of both Drone and Queen Excluder Zinc and all about its uses. Send for it as well as for my 1894 Price-List of Apiarian Supplies.

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Send 2c. for complete detail information. Designs must be entered before Nov. 15, 1894. Designs not awarded prizes will be returned, or bought at private sale.

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At these prices you can paper a small room for 50c.

Send 10c for postage on samples of our new fall paper and our book **"How to Paper and Economy in Home Decoration,"** will be sent at once, showing how to get $50 effect for $5 investment. *Send to nearest address.*

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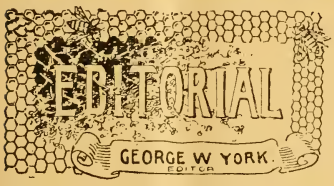
VOL. XXXIV. CHICAGO, ILL., SEPT. 13, 1894. NO. 11.



Wintering Bees Out-Doors is a subject which Chas. Dadant knows a good deal about. On page 338 of this issue of the BEE JOURNAL, he tells how it may be done successfully. Read it.

A Glorious Rain came to the region of Chicago on Monday, Sept. 3rd. How it did brighten up the withered herbage along the streets of the suburbs! It seemed as if we hadn't seen any rain for two months, so the grand down-pour that we had last week was greatly appreciated. It will likely help out the fall flowers, and thus assure sufficient stores for the bees the coming winter.

Subscription Credits are not fully understood by some, it seems. If the label on the wrapper of your copy of the BEE JOURNAL reads "Aug94" or "Aug4," it means that your subscription is paid up *to the end* of August, 1894. Your subscription is always paid to the *end* of the month named on your BEE JOURNAL wrapper-label. Please remember this. If it now shows any month back of August, 1894, we would be pleased to have you pay up to the present time, and *also* a year in advance.

A Sketch and Portrait of Bro. Ernest R. Root appeared in *Gleanings* for Sept. 1st. Mr. J. T. Calvert, the genial business manager of *Gleanings*, taking advantage of E. R.'s absence on his Western bicycle tour, inserted the half-tone portrait and biographical sketch written by Dr. Miller for the AMERICAN BEE JOURNAL last year. Wonder if Bro. R., when he first saw it, didn't think that was a pretty slick "put up job." We think it was, and "served him right," too, for not letting his many readers see his face long ago. The picture shows him with beard, but we prefer him as he was when here two weeks ago—with simply a mustache. But owing to a throat affection that troubles him at certain seasons of the year, he *affects* to wear a beard!

The C. B. & Q. Railroad is the *best* line to take for the North American convention at St. Joseph, Mo., on Oct. 10th, 11th and 12th. The "Harvest Excursion" starts from all points east of the Missouri river, on Oct. 9th, and your tickets will be good for 20 days. The fare for one way and $2.00 will take you the round trip from any point. It's cheap! Everybody can go! The total cost for round trip from Chicago, on the C. B. & Q., will be $14.50. Say, you Eastern friends, why not write ahead, and make up a "special car" from Chicago? We can have it if we can fill it. What do you say?

Agents at Fairs.—We would like to have some good, live bee-keepers represent the BEE JOURNAL at the Fairs this fall. Sample copies free. Write to us about it, if you can attend to this work.

Sound Advice is worth heeding. One of our exchanges contained an item some time ago that we feel well deserves to be copied. Read it, and then think over it. We don't print it because we have noticed any dropping off of our own list of readers lately, but because it has so much truth in it:

SOUND ADVICE FROM A PHILOSOPHER.

These are hard times for the farmer, there is no doubt about that, and he is looking in every direction to cut down expenses, and it is right for him to do so, but I wish to say a word against cutting off one item, and that is the farm paper. Don't stop your paper! the harder the times, the more you need the paper. If there ever is a time—and there never is—when a farmer can afford to do without the farm journal, it is when times are good; then he can get along somehow, because crops are good and prices high, but even then he would make more money if he kept well informed about his business.

Now, don't stop your paper; you can find some way to pay for it without sacrificing anything essential if you try. If you feel too poor to pay for your paper, you will feel still poorer after you have stopped it; you will feel more discouraged, for while you have the paper you will read how other men are doing—some of them worse off than yourself—and you will feel encouraged to go on and try harder than ever to earn the hard-to-get dollars.

If in the above you will substitute "bee-paper" for "farm paper," it will be just as truthful. By all means, *read*, READ, READ. It will pay you.

Dr. Wm. R. Howard, of Ft. Worth, Tex., is now Professor of History, Pathology and Bacteriology, in the Medical Department of Ft. Worth Universlty. He is also Secretary of the University Faculty. The "First Annual Announcement" contains this notice of Dr. Howard's work:

This department will give instruction in the use of the microscope in the cutting, staining and mounting of specimens, and the examination of healthy and morbid tissues. Students will study in tube, plate, drop culture and stained cover glass preparation, all pathogenic and non-pathogenic forms of micro-organism capable of cultivation. Two lectures will be delivered each week, and four hours laboratory work required.

From this it will be seen that the position is an important one, which the Doctor will certainly fill acceptably. His book on "Foul Brood" is a good sample of what he can do in the line of careful scientific investigation.

Honey Statistics for 1894.—In *Gleanings* for Sept. 1st, we find the following editorial paragraphs regarding the honey crop of the United States this year:

ONE OF THE POOREST CROPS ON RECORD.

Three weeks ago we sent out about 200 return postal cards on which were printed these questions:

1. What has been the honey season in your vicinity, so far as you know?
2. What was your average yield per colony, in honey, both comb and extracted?

Space was left for a brief answer under each, and for name and address of reporter:

Briefly stated, the honey crop seems to have been most abundant in central and lower Florida; good in Texas; fairly good in spots, in Kern and Inyo counties, Calif., in Oregon, Utah, Colorado, Minnesota, Wisconsin, Ohio, Michigan, New York and New England; very poor in other portions of most of these States and others, and a total failure in the most of California, Nebraska, Iowa, Illinois, Missouri, Kentucky, Tennessee, Mississippi, North Carolina, South Carolina and Georgia. The general impression given by the reports for the whole country is not flattering.

One peculiar thing we have noted from reports is the uneven distribution. Of two bee-keepers but a few miles apart, one would get a fairly good crop, while the other's bees would be starving. On this account these reports may not fairly represent many localities, as the reports received will not average more than five or six to each State.

From the above it would seem that the poor crop has been so general throughout the United States that there would be scarcely enough honey to supply the demand. But what do we find to be the case? Why, judging from a recent conversation with a large dealer in honey here in Chicago, there is plenty of honey in the country somewhere. He said he knew where he could get it by the carload—from the West, and also the far East. But the limited demand for honey just now, may have caused the appearance of a bountiful supply.

In speaking of the honey market, on another page of the same copy of *Gleanings*, Bro. Root has this to say:

Comparing the reports of the season's honey crop with the market report of prices gives a vivid picture of the very depressing effect on prices of the close times through which we have been passing. Notwithstanding a very short crop, judging from reports, we have never known prices to be lower so early in the season. Last year, those who got their honey to market early, secured the best prices, as a rule. If

times improve from now on, as we hope they will, the demand for honey, and price, must also improve in view of the short crop.

Do not be in haste to sell at ruinously low prices what little honey you have secured, but help to tone up the market by a little more independence in asking a fair price for your product.

That's a good hint in the last paragraph. If you don't ask a fair price for your honey, you certainly won't get it. Oftimes bee-keepers themselves are to blame for low prices of honey and a glutted market. Let all endeavor, if possible, to secure a more even distribution of the crop obtained, and thus realize at least a reasonable remuneration for their labor and skill.

Reduced Rates, (1⅓ for the round trip) in addition to the "Harvest Excursion" rates have been secured on many of the roads running to St. Joseph, Mo., for the North American convention on Oct. 10th, 11th and 12th. The following from Secretary Benton explains the matter more fully:

REDUCED RAILWAY FARES TO ATTEND THE NORTH AMERICAN AT ST. JOSEPH, MO., OCT. 10TH, 11TH AND 12TH.

The Western Passenger Association, under the conditions named below, will grant reduced railway fare to those who travel over their roads and attend the meeting of the North American Bee-Keepers' Association at St. Joseph, Mo., Oct. 10th, 11th and 12th.

Conditions.—Full fare will be charged going. Return-tickets will be issued at *one-third the regular fare*, provided the purchaser presents a certificate from the agent of whom he obtained his ticket, and provided also at least 100 such certificates shall be presented. There can be little doubt on this last point, especially as special round-trip excursion tickets, even such as are issued to parties of 10, 25, or more, traveling in a body, will count toward the 100, provided each purchaser is careful to secure a certificate of purchase from the ticket agent who sells him the ticket, and to present this certificate at the convention to be countersigned by the Secretary of the Association.

Therefore *do not fail to secure a certificate when you purchase your ticket, whether single or round-trip, and no matter whether you intend to take advantage of the reduced fare or not.* It may aid others in obtaining the reduction.

Time of Tickets.—Valid Oct. 6th to Oct. 15th; that is, they may be purchased three days (not counting Sunday) before the first day of the meeting, and the return-ticket may be obtained any time up to the night of Oct. 15th.

Railways.—The following are the roads included in this reduction: Burlington, Cedar Rapids & Northern; Chicago & Alton; Chicago & Northwestern; Chicago, Burlington & Northern; Chicago, Burlington & Quincy; Chicago Great Western; Chicago, Milwaukee & St. Paul; Chicago, Rock Island & Pacific; Chicago, St. Paul, Minn. & Omaha; Hannibal & St. Joseph; Kansas City, St. Joseph & Council Bluffs; St. Louis, Keokuk & Northwestern; Illinois Central; Iowa Central; Minneapolis & St. Louis; Missouri Pacific; Rock Island & Peoria; Sioux City & Pacific; Wabash; Wisconsin Central lines.

When necessary to pass over more than one line, and in case a through ticket with a certificate cannot be obtained, it will be necessary to obtain a certificate from each agent from whom a ticket is purchased, in order to entitle the holder to the reduction on return ticket.

Those who do not live within the territory covered by these lines should, wherever practicable, purchase a local or a round-trip ticket to the nearest line named above, and secure there a ticket to St. Joseph, with certificate of purchase.

Further notice will be given in case other railway lines grant reduced rates.

Harvest Excursion.—Some may be able to take advantage of the "Harvest Excursion" rates (one-half fare plus $2.00) given Oct. 9th, full particulars of which can be obtained of your local agents.

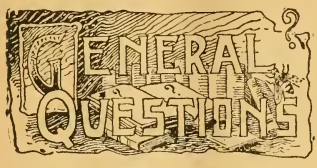
Change of Date.—Note the change, as announced by President Abbott, in the date of the meeting from the middle of the month to Oct. 10th, 11th and 12th.

Place of Meeting.—The convention will meet in the rooms of the Commercial Club in St. Joseph, at the corner of 3rd and Edmond streets, three blocks from Francis Street Depot. Take electric cars at Union Depot and get off at 3rd street.

FRANK BENTON,
Sec'y. N. Am. Bee-Keepers' Association,
U. S. Dept. Agriculture,
Washington, D. C.

We might add to the foregoing that it is desired to have a showing of honey, especially extracted, from every part of the country at the convention, and it is requested that every one who attends should bring a bottle of extracted honey, with the kind of honey and the place where it was gathered marked upon a label to be fastened to the same.

The Portrait and Apiary of Mr. F. A. Gemmill, President of the Oxford, Ontario, Bee-Keepers' Association, were shown in the September *Canadian Bee Journal*. Both pictures are good. Bro. Gemmill is one of Ontario's best bee-keepers. He says: "I find the employment [bee-keeping] not only interesting and ennobling, but a moderately paying occupation as well."



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Italian Bees as Comb-Builders.

Are Italian bees equal or snperior to the German brown, or common black bees, as comb-builders? J. F. C.
Garden City, Kans.

ANSWER.—I don't know that there's any difference in general. Some colonies of Italians are a little faulty as to making white looking comb. They fill the honey too close to the capping, making it look dark and watery.

Why Were Queen-Cells Built?

What is the cause of bees building queen-cells when they have a young queen which has been laying about four weeks, and the colony is strong?
Quincy, Ill., Aug. 21. H. M.

ANSWER.—Without knowing all about the circumstances, it is not easy to say. Possibly it is one of those rare cases where they are getting ready to swarm. Possibly the queen is not satisfactory and the bees are about to supersede her. This latter is quite often the case, but is not known very often where queens are not clipped.

Italian vs. Blacks as Robbers.

Are Italian bees worse than blacks for robbing? While I had blacks only, I had no trouble with robbers, but lately (with Italians only) I have had a good deal of trouble. Not long since I wanted to Italianize a colony of blacks, and in taking out the frames while looking for the black queen I broke some comb, which started the Italians to robbing. They came in such numbers that I did not know what to do. I contracted the entrance to about ¾ of an inch, yet they piled up on the hive like a swarm. I then got camphor and carbolic acid, made a solution, and sprinkled them all thoroughly, but "no go"—they never let up until they had killed every black bee. Now could I have done more than I did? If so, what? F. M.

ANSWER.—My experience is just the reverse of yours. When I had black bees I had some pretty tough times with robbing. This year has been one of entire failure of the honey crop, when there's every inducement for robbing, and I've had no trouble whatever, although my bees were never so nearly all pure Italians.

I doubt if there's any particular difference. Once started, perhaps Italians are more energetic at robbing than blacks.

If you ever get into a scrape of the same kind again, pile hay or straw at the entrance, up to the top of the hive if necessary, then pour on water and keep it thoroughly wet. This will dampen the ardor of the robbers, for water is quite dampening, but don't be sparing of it.

After all, prevention is better than cure, and robbing is nearly always started by the bee-keeper himself.

Why No Surplus Honey Stored?

This season my bees have not stored any surplus honey up to the present time, and I have had but two swarms, and they issued from one hive. The rest of my colonies haven't swarmed, nor have they stored any surplus honey. There are plenty of fall weeds to work on now, as most of them are in bloom. What is the reason they have done so poorly?

My bees are hybrids and Italians mixed. My neighbor has 16 colonies and he has had four swarms. The balance have done nothing. What is the cause of this delay and lost time? The bees are hard at work, but I don't know what they do with so much wax, or where they put it. O. D.
Mishawaka, Ind., Aug. 20.

ANSWER.—My bees have done just like yours. The trouble is that you and I both have that kind of bees that can't store honey unless they have something to store it from, and I don't know of any one that has any other kind. Some seasons blossoms are scarce, and some-

times blossoms are plenty but for some reason they don't furnish nectar. The season has been to blame this year, not the poor bees.

Did They Kill the Queen?

Last evening I noticed a large ball of bees in front of one hive (the last swarm of the season, about July 28). On separating the bees I found they had killed a queen. This morning they seem all unsettled, rushing in and out of the hive in great numbers. Do you think they had killed their own queen, or some other? If their own, why? A few days before that I found a dead queen in front of another strong colony, but as the bees made no fuss, I concluded they had killed a young queen. Do you think I was right?

Langlois, Oreg., Aug. 6.

ANSWER.—Hard to tell. From the after uneasiness I should suspect their own queen was killed in the case you first mention, possibly because a number of foreign bees entered. Likely your supposition was correct as to the second case.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Sept. 15.—S. E. Kansas, at Bronson, Kan. J. C. Balch, Sec., Bronson, Kans.

Oct. 1.—Southern Minnesota, at Winona. E. C. Cornell, Sec., Winona, Minn.

Oct. 4.—Utah, at Salt Lake City, Utah. Jno. C. Swaner, Sec., Salt Lake City, Utah

Oct. 10-12.—North American, St. Joseph, Mo. Frank Benton, Sec., Washington, D. C.

1895.

Jan. 28.—Venango Co., at Franklin, Pa. C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill. 147 South Western Avenue.

Great Premium on page 235!

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.
McVicker's Building, CHICAGO, ILL.

Catarrh—Its Cause and Prevention.

It is not always pleasant to hear or read the cold facts, but candor should compel all writers or speakers to state the exact truth, and let decisions be what they may.

Much—very much—is written and said regarding catarrh, and all sorts of apologies are offered for its existence and fearful extension. There is every assurance that it is making fearful progress and inroads into the human economy, and for this reason the plain truth as to its usual cause and prevention should be stated.

Many years of special work and study in the various forms and ravages of catarrh, thoroughly convinces me that this infliction is largely due to want of proper hygienic information and attending cleanliness. I know this idea will shock some, but let the shock come if it have the result of earnest consideration and improvement.

Catarrh, then let me bluntly state, is the result, usually, of neglect in observing the laws of physical purity. It is the result of filthy habits, in not keeping clean—just as the itch, lice, and many other bodily infections occur—from want of proper cleanliness.

Well, now, don't hold your hands up in holy horror! It is *so!* Had your parents insisted on your daily cold bath, including abundant snuffing of water up the nostrils, and the frequent use of your pocket handkerchief, you might have entirely escaped any form of catarrh. But, no! you have been permitted to allow the accumulations in the nose (which naturally would occur) to be retained until they became an obstruction to free breathing, and then instead of using a handkerchief to blow your nose freely, and so keep it clean, the horrible habit of "blowing the nose the wrong way" is resorted to, which brings the accumulations in the nose into the throat, and is then expectorated! Just notice the actions of men and women in this regard—they have handkerchiefs, but how seldom do we see them used for their obvious purpose! One would conclude that the 'kerchief was an article of ornament, to dangle

from the young lady's belt, or its corner peer out of the young man's coat-pocket, that the world may see and know he is the proud possessor of a linen square; but its visit to the laundry is a matter of rare occurrence! By all means cheat the washerwoman and enrich the doctor!

Well, of course, even so lenient a friend as Mother Nature will not tolerate such infractions, and hence it occurs that the constant practice of this abomination, year after year, results in very serious organic changes in the nose, and finally in the whole respiratory tract. The secretions retained in the nose cause destruction of tissue, more or less serious, and the discharges gradually acquire a disposition to go backward, the mucous becomes decomposed and irritant, and soon affects the parts over which it passes; hence we have throat troubles following. When asleep it is unconsciously drawn into the bronchial tubes in breathing, and ultimately bronchitis results; the latter, by incidental coughing, irritates the lung tissue, and step by step the foundation is layed which culminates in consumption. If we superadd to this the habit of smoking, we greatly hasten this dreaded disease.

Once more. The acrid secretions just mentioned, come in contact with the opening of the inner canal of the ears, and by its action sets up inflammation of that canal, closing it and rendering hearing much impaired, or entirely destroyed. Then it is that the skilled physician must be consulted, and as the difficulty to overcome has been years in progress, so it may be several months in curing, when that result is possible. A cure is usually practicable if the patient applies as soon as he finds his hearing less acute than formerly. If long postponed, the chances of success are far less favorable.

Catarrh is responsible for eight out of every ten cases of deafness, and the fact that it is so alarmingly on the increase should admonish us to early seek counsel from the best sources attainable, always remembering that the best service is by far the cheapest.

But what has so far been said presupposes persons of inherited vigorous health, and if the consequences mentioned may occur to such, how much more disastrous may it be to those who have inherited weakness of the lungs or general system! Hence, it is that we see mere children who are predisposed to organic diseases, fall early victims to affections of the lungs, throat, ears, or kidneys, through the acquirement of catarrh. Especially is this the case in the colder latitudes.

And how careless of parents to ascribe laziness as a pretext to young people's indisposition! Children in school and at home have often been punished for beedlessness in not paying prompt attention to commands, when in reality they had not *heard* what was said, through dullness of hearing. How frequently such afflicted children are jeered as "st upid," when, if their hearing were as acute as that of others, they would be considered equally bright! A little more discretion in our conclusions will award children much greater justice, and in turn secure for us greater affectionate esteem. Children never forget cruelties inflicted upon them in their helplessness, nor are the perpetrators recompensed. Anger will ever and anon rankle in the bosoms of the sufferers, and the spirit of resentment is ever present against those who caused their humiliation! Parents and teachers will do well to consider their responsibilities, that the future may hold for them merited love and reverence!

Parents, as you love your little ones, be admonished by your boy's cough, by your little daughter's feeling of "tired," by their want of spirited playfulness, by their lack of interest in their surroundings, to early consult your physician, and carefully heed his advice.

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

CONDUCTED BY
MRS. JENNIE ATCHLEY,
BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 10.

(Continued from page 270.)

HONEY-PLANTS CONTINUED.

NORTH CAROLINA.—I have obtained the following information from Mr. W. H. Pridgen, of Creek, N. C., a reliable man and good bee-keeper:

"The principal honey-plants, and their time of blooming, are as follows: Elm blooms Feb. 15th, maple March 1st, fruit-bloom March 15th to April 1st, white clover, from which North Carolina gets her best honey-flow, begins about May 15th. June 1st to 10th poplar blooms, and when the weather is favorable it yields lots of honey. Also persimmon blooms about the same time, and is good July 1st. We have sourwood, which gives our white honey. Bees usually begin swarming in North Carolina about April 15th to May 1st."

FLORIDA.—The following I obtained from Mr. J. B. Case, a reliable man, and a good bee-man of the South:

"Usually about May 15th we get here in Florida a fine honey-flow from the red bay, which grows very luxuriantly in the hammocks. The honey is rather dark, but of fine flavor. Gallberry opens about the same time, and where it is plentiful, it affords a surplus. About May 10th to 15th saw-palmetto begins to yield honey, and in locations two or three miles from the ocean, and, in fact, all along the coast, this is the main crop. The nearer salt water the more thrifty it grows. It blooms profusely, and yields honey in abundance, of light color and good quality.

"In July the cabbage palmetto—a kind of palm—sometime yields considerable honey of fine quality, but coming as it does in our rainy season, and the blooms being very tender, it is quite liable to blast, or scorch by the hot sun coming out after a shower, and also from other causes it is very unreliable as a source of honey, but when everything hits just right, it is hard to beat for honey.

"Also the river bottoms are full of red mangrove, yielding a thin, white honey, and some seasons it affords honey in great abundance, but as its area is quite small and well stocked by bees being shipped in from the surrounding country in such quantities, it has to be a very favorable year to get paying yields from it, and lately its yields have been light.

"The above will be about right for all the eastern coast of Florida. Bees, to be profitable here in this State, must be kept near the Ocean or Gulf, or near the rivers where are the large hammocks and near large orange groves. Swarming usnally begins about March 15th to April 1st, and as this is about the time oranges are in bloom, and as the trees vary, the time of swarming also varies."

KENTUCKY.—The following information as to Kentucky, I got from Dr. J. W. Crenshaw, of Versailles, whom I know to be reliable:

"Soft or water maple blooms from Feb. 1st to March 15th, according to the season, yielding both pollen and honey, and is of great value, as it gives an impetus to brood-rearing, which stimulates the bees until warm weather. It remains in bloom about a week, but the bees seldom have more than one to three days to work on it.

"Dandelion blooms March 1st, and furnishes both honey and pollen. Fruit-bloom continues from March 25th to May 1st. Sugar maple blooms April 15th—mainly honey in small quantities. May 10th black locust blooms, remaining two weeks, and most years yields a large amount of honey." [I will add here that black locust is one among our Southern honey-yielders that only yields honey from its bloom one time; that is, it never has any honey except that on opening; but it is sometimes two weeks getting done blooming.—JENNIE ATCHLEY.]

"The honey is clear, and its flavor is second to none in the world. Unfortunately it usually blooms during our rainy season, and the bees have but little chance at it. The bees only had three days to work on it last year, and they filled their brood-chambers.

"White clover blooms from May 1st

to August. This plant is the only one we can always count on in this part of Kentucky for a crop—June being the principal month of its blooming, and some years the whole face of the earth is covered with it here. It *always* blooms more or less, and *always* yields honey—enough for an abundant winter supply.

"We have a few basswoods left yet, and some poplar, and no doubt we get some honey from these sources yet, but not in paying quantities. Strawberries, raspberries, squash and tomatoes all give us some honey and pollen. Heart's-ease, or smartweed, which grows in damp places, frequently yields well, but I know nothing of the honey. Buckwheat for bees here is nearly always a complete disappointment. Golden-rod has been observed very closely by me for a number of years, but I have never seen a bee on it."

ALABAMA.—The following data was furnished by that whole-souled bee-keeper, J. M. Jenkins, of Wetumpka, and will correctly apply to his part of the State:

"My bees begin swarming about April 5th to 15th. Our honey comes from willow, poplar, maple and swamp flowers. This locality is not much for honey. Cotton plantations are all around me—only a little natural growth along the rivers—no clover, and not much basswood here."

I have correct data for nearly all the Southern and Western States, and to make this lesson short, considering its great subject—the honey-plants—I will say that the six southern counties of California, from which counties the *most* honey is obtained, that their principal honey-plants are the black and white sages, the white variety growing upon the mountains or highlands, and the black grows upon the valley lands. The honey from white sage ranks first alongside of any honey in the United States, and the black sage is also good, but has an amber color, which spoils its sale in white-honey markets.

Nearly all the Southern States get a crop of nice, white honey. I used to keep bees in Tennessee, and some of the *finest* honey I ever saw was gathered there. Also Arkansas has some fine honey. Mississippi, the Carolinas, and Georgia, all produce good honey. It is a fact beyond a doubt that honey gathered from plants, trees, etc., in low lands is not as white as that gathered from the high lands. Bees have been kept more extensively in the low lands of the South, and almost all their honey has been dark, and when shipped to Northern markets goes by the name of "Southern strained," as though the bee-keepers of the South never saw an extractor! There is also white honey in *all* the Southern States.

JENNIE ATCHLEY.

(To be continued.)

Will Have Good Fall Crops.

It is raining again to-day (Aug. 25th), and vegetation is growing very fast. Our whole landscape has the fragrance of a flower-garden. People are going to have good fall crops here, and have plenty. Bees are working like Trojans, and may fill their hives again.

JENNIE ATCHLEY.

Bee-Keeping for a Livelihood.

MRS. ATCHLEY:—I take the AMERICAN BEE JOURNAL, and I think it the best bee-paper printed. I am now 66 years old, and am trying the bees for a livelihood. I am going to see what there is in bees. I have done well so far, and if common bees will pay, I think the better grades will pay better, and my motto is, "Try the best." J. F. CAREY.

Phoenix, Ariz., Aug. 11.

Friend C., I think you are quite right. I am glad that you are in line with so many other bee-keepers in thinking the "Old Reliable" a good bee-journal.

I am also in line with you when you say that if common bees will pay, that better bees will pay more. I think now that if I had to fall back to the old native German or black bees, that I would keep only bees enough for my own use, as they *cannot* be manipulated to pay as the Italians can.

JENNIE ATCHLEY.

Kind Words—Severe Drouth.

MRS. ATCHLEY:—We are just as anxious to hear from you as ever. When the "Old Reliable" comes, the first we examine is your writings, and as the AMERICAN BEE JOURNAL now stands, it is the best bee-paper we have, giving information both from North and South. You have not said anything in regard to the country lately. We are anxious to hear about how vegetation is down

there. And did you have much drouth? We are almost burned up here. The corn crop is our main support, and it is an entire failure. Wheat is better than we expected. The late frost last spring injured vegetation badly, then we had four weeks of beautiful weather through June, and up to July 3rd we had plenty of rain, but we have not had any since, and that is more than this country can stand. We have had but one swarm out of seven colonies, and lost it. What little honey we got was good—mostly alfalfa. MRS. L. P. SMITH.

Jewell, Kans., Aug. 11.

Dear Mrs. Smith, I thank you very much for your kind compliments, and I assure you I shall try to interest some, if they will read "In Sunny Southland." I trust that I may be able to merit all the kind words from you and others that I receive *almost* daily, encouraging me, and helping me to give more attention to my department.

In regard to this section, I will say that our drouth was broken up by a heavy down-pour about a month ago, and this country is like a May wheat-field in Kansas, and we do not need much rain here. There are plenty of vegetables, and people are happy. I am sorry to hear of your drouth.

JENNIE ATCHLEY.

What Best to Plant for Honey.

Query 940.—Taking into consideration its value for other purposes besides honey, what honey-plant will it pay best to raise in your locality?—Colorado.

Buckwheat.—E. FRANCE.

Alsike clover.—R. L. TAYLOR.

Alsike clover.—G. M. DOOLITTLE.

Alsike clover.—MRS. L. HARRISON.

Probably Alsike clover.—J. A. GREEN.

Fruit — almost any variety.—A. J. COOK.

Alfalfa and buckwheat.—MRS. J. N. HEATER.

Either white or Alsike clover.—JAS. A. STONE.

Alsike clover or buckwheat.—J. H. LARRABEE.

Alsike clover mixed with other grasses.—P. H. ELWOOD.

White clover. Alsike is also valuable.—S. I. FREEBORN.

Alsike clover is, beyond comparison, the best.—M. MAHIN.

I don't know, as I have had no experience in the matter.—J. E. POND.

1. Buckwheat. 2. Alsike clover. 3. Common white clover.—EUGENE SECOR.

Alsike clover, just as alfalfa is, no doubt, best for Colorado.—EMERSON T. ABBOTT.

Alsike and sweet clover, and protecting and raising linden in forest, park and yards.—J. M. HAMBAUGH.

I'm not sure but sweet clover may be the one, if it can turn off a good crop of hay by being cut early.—C. C. MILLER.

Buckwheat is the only plant in sight for the combined purpose. Hold on! Alsike is far ahead of any other plant.—C. H. DIBBERN.

Horsemint is the only plant I know of that would pay to cultivate at all here for honey. But cotton pays in both honey and cotton. So I suppose I might say cotton also.—MRS. JENNIE ATCHLEY.

In my locality, perhaps Alsike clover. The chief trouble in the way of this clover is, in my locality, it is strictly biennial in its habits. It will make but one good crop without re-sowing.—G. W. DEMAREE.

In my location I know of no special plant that I could thus cultivate. But if one had suitable soil with no use for it, it would pay him to plant the poplar (*liriodendron*). This is the greatest honey-producing plant of the Southern States.—J. P. H. BROWN.

Alfalfa. Buckwheat is another staple crop that yields much honey, but of a dark character. White clover is probably the leading honey-plant of our nation. Out here in Colorado, we depend largely upon the wild flowers of the prairies and mountains—the "Rocky Mountain honey-plant" (a sort of teasel) is fully what its name implies, and very abundant.—W. M. BARNUM.

Have You Read the wonderful Premium offers on page 323?

VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

FEEDING BEES FOR WINTER.—The answers to the question about feeding (page 270) leave one somewhat mixed up as to what is best to do. Some advise to feed as soon as possible, even in August, while others advise to wait as long as possible in hopes fall flowers may yet yield.

I can't say for other localities, but in northern Illinois I feel safer not to put off feeding very late. Sometimes the bees gather as late as the last of September, but oftener not. I think I would rather run the risk of taking something away if they are too full, than to wait till late with the risk of having freezing weather catch me with empty combs or unsealed stores.

I generally fed as fast as the bees would take it, but I'm getting to believe I'd rather have the feed so thin that the bees shall take some time at it. If the theory is correct, that formic acid is furnished by the bees through the circulation, then it is likely that the bees will have a better chance by having the feed thin as nectar.

SOMEWHAT SURPRISED.—Hello! what's this? Page 272 opens up on something that doesn't look just like the "Old Reliable," but it says AMERICAN BEE JOURNAL at the top, so it must be all right. Don't know for certain just how I do like it. When any of my old friends come out in a new rig, I must get used to it before I really like it. Makes a very pretty page, even if it does look like a stranger, so I suppose I'll get used to it, and as there are just eight pages of that kind thrown in the middle of the number, it sets me to wondering whether possibly Miss Godfrey* has been giving free reign to a woman's taste.

BRACE AND BURR COMBS.—Bro. Doolittle, what are you thinking of, to come out as you do on page 272 at this late day? The time for it was when such earnest struggles were being made to get rid of brace-combs, and not after the struggle is pretty much over, and we have found how to prevent them. But then it is only fair to say that you entered your protest long ago.

If you are right, that "for every pound of honey stored in the brood-nest at the commencement of the season, or honey harvest, there will be five pounds less stored in the sections," and that bees commence much sooner with brace-combs, then we ought to cultivate brace-combs.

I don't suppose it's necessary to call you a liar, but if I could be set down for half an hour at your pleasant home we'd have a comfortable fight over your position. In the first place, don't the bees *always* commence storing in the brood-nest

before storing in the sections? In the second place, with bait combs I don't think I ever knew the bees to crowd the brood-nest before starting above.

But aside from all other considerations, I want the surplus apartment detached from the lower story by a space of clean wood with no braces or burrs, just because I feel quite sure the sections will be a little whiter for it. The closer the section is to a black brood-comb or brace-comb, the more black wax I find on the section.

HIGH IDEALS.—It's a good plan to have a high ideal, and Ben There would probably make better work for the high ideal he has set for himself on page 272. I fancy, however, I can see a quiet smile creep over the faces of the veterans as they read, and a remark something like this may come from some of them: "Young man, that's all right for a tenderfoot, but if ever you get fairly into the work, trying to get enough honey to swap for your bread and butter, some of your views will undergo modifications."

For instance, I'm quite sure you'd modify your idea as to having 36 square feet of ground occupied by each hive, when you learn that you can have them more convenient for yourself, and with less danger of the bees getting into the wrong hive by using only one-third of the ground per hive. But it's a good plan to have high aims, Benjamin. Marengo, Ill.

[*Doctor, Miss Godfrey pleads "not guilty" to "giving free rein to a woman's taste," in the matter you refer to. No, "ye editor" must take all the blame this time, for he *thought* it would be a nice change to have this department set in different style from the rest of the BEE JOURNAL. Guess you'll like it all right when you "get used to it."

By the way, we might say for the information of the rest of our readers, that Miss Mattie C. Godfrey is the lady that sets up nearly all the type for the BEE JOURNAL each week. She has done this work continuously for over 11 years, or ever since January, 1883, so that now she feels quite well acquainted with at least the *names* of all who write anything for these pages. Miss Godfrey is one of the few women that are "worth their weight in gold." Now, we don't want any frisky young fellow to come "spooping around" here, for he'd have to be unusually perfect to receive anything from her except a firm "No!" for an answer.—EDITOR.]

MORE ABOUT BEE-PARALYSIS.

BY ADRIAN GETAZ.

I must say positively and emphatically that Prof. Cook is mistaken when he says that feeding will cure bee-paralysis. The disease is in all the apiaries of this section of the country, more or less; and has been in mine since I bought my first bees. It has shown itself as well in fed colonies as in others, and often in strong, well-provisioned colonies as much as in weaker ones.

It is early in the spring that the malady is the worst. It is shown by a large number, often the majority of bees, being black, or rather hairless and shiny, as if they had been polished. At the same time they are sluggish, and as if half-paralyzed in their movements. Those in which the disease is less advanced, show it by uneasiness, frequent scratching and twisting of their wings and legs, as if they were itching. As the season advances, the old, shiny bees gradually die out, brood-rearing increases, young bees are born by the thousand, more or less diseased; but in all cases not so much as the old ones, or at least they do not show it so much. Later on the number of young and healthy, or at least comparatively healthy bees increase considerably, and the management of the hive, if I may use that term, falls into their hands. They soon realize that something is wrong with the old bees, and proceed at once to throw them out of the hive. This, in this locality, and with the

average colonies, occurs during May and June. The diseased bees are thrown out gradually, occasionally in large quantities, and the process is kept up as long as other bees show signs of the disease.

During the summer bees wear out too rapidly to have time to show much of the sickness; young bees come in rapidly, and as the season advances less and less diseased bees are seen, until when the winter comes, none but apparently healthy bees are in the apiary.

By that time the inexperienced (?) apiarist thinks that the disease had run out of itself, or if he has applied salt or sulphur, or something else, he imagines that he has found a sure cure, and immediately writes so to some bee-paper. But, alas, for his hopes—the following spring black, shiny bees will be as numerous as the preceding years.

In a recent article in *Gleanings*, Dr. Brown, of Georgia, describes some disease of bees that he thinks caused by poisonous honey from the yellow jasmine. According to his description, his bees must have the bee-paralysis; the fact that the yellow jasmine is in bloom at the time the bee-paralysis is most shown, does not prove that the poisonous (?) honey is the cause of it. We have no yellow jasmine here, and yet our bees show the same symptoms as his do.

Knoxville, Tenn., Aug. 24.

P. S.—In my article on page 240, I said that bee-paralysis has always existed in all the apiaries. I meant to say, all the apiaries of this part of Tennessee.

WINTERING BEES OUT-DOORS.

BY CHAS. DADANT.

A good wintering of bees is the stumbling-block of bee-culture in the northern and central States of America. There are so many cases of failure that the problem of a successful wintering of bees cannot be too thoroughly studied. The main causes of such failures are:

1. A population too weak to maintain a sufficient degree of heat in the hive.

2. A quantity of food inadequate with the needs of the colony during the winter months.

3. Food of so poor a quality that bees living on it cannot remain in good health.

4. A hive which cannot sufficiently protect bees against the cold of winter.

5. A hive so close that the dampness produced by their breathing wets the bees, their comb, and their food.

6. A sequestration of bees, too long protected to allow them to get rid of their feces before they become sick with diarrhea.

To overcome these difficulties bee-keepers have tried several ways of wintering bees:

First. On the summer stands. Second. In rooms above ground. Third. In silos. Fourth. In cellars. We will examine successively all these means.

The first requisite to succeed in wintering bees on the summer stands is a large population; a part of it ought to be young bees. A large population maintains easily the heat inside the hive, and the bees can easily pass from an emptied comb to another containing honey. Besides, as the outside of the hive is kept warm, the bees do not need to eat so much to maintain the indispensable heat, and they can more easily bear a longer seclusion, since their intestines are not so much loaded with feces.

A colony containing a quantity of young bees succeeds better in its wintering

than another with old bees only, because the young bees, which have gone out of their hives but a few times, are more careful, and do not rush out far from the hive, as do the older bees, which, accustomed to go in quest of honey or pollen, go far away, without looking backwards, during a bright winter day, and are often caught and chilled by a change of wind, or by an occasional cloud which darkens the sun.

A sufficient quantity of food. Honey is the only food necessary in winter for bees on the summer stands; but it is to be noticed that the food is used not only to sustain life, but to produce the indispensable warmth, for it has been often ascertained that a large population has consumed less in winter than a smaller one, whose bees were compelled to eat more to keep warm. It is generally admitted that 25 pounds of honey per colony is not too much, to spare the bee-keepers all anxiety about the needs of their bees during the whole winter.

The Home of Mr. W. Z. Hutchinson, at Flint, Mich.

Several means are used to provide bees with a sufficient quantity of food. When but a few colonies of an apiary are short of honey, the most simple means is to take from those which have some to spare what the others need. Such an operation is easy with movable-frame hives. But when no colony has any honey to spare, and this case happens too often to the bee-keepers who use small hives, especially in poor years like this one, the best food to give is sugar syrup, fed to the bees in October. This syrup made with a quart of boiling water and four pounds of granulated sugar, to which one pound of honey or more is added to prevent crystallization, is given at evening, when yet tepid, in old tin cans covered with a piece of cotton-cloth, and inverted on the upper bars of the frames. The bees suck the syrup through the cloth. The Hill bee-feeder, made on the same principle, but entirely of tin, is also used, and saves much labor. A strong colony can put in the comb, in a single night, the contents of three or four of these cans.

But the insufficient quantity of food is not the only want to be supplied. Its bad quality should also be feared, for honey-dew, or dark honey from fall flowers, contains too much indigestible matter. When bees, during winter, can fly out once or twice per month, they have good opportunities to void their feces, and they can remain in good health with food of poor quality; but when the weather remains cold for six or seven consecutive weeks or more, bees fed on poor honey get the diarrhea, soil the inside of their hive, and perish.

To prevent these bad results, it is of good management to extract all the dark honey, especially the honey-dew, and to replace it with sugar syrup. This extracting is especially indispensable when bees have stored fruit-juices. We once bought the combs of some hundred colonies which had been unable to live in winter on these juices, which contains too much water and other matters, and too little sugar.

When the cluster of bees is unable to produce the indispensable warmth during the cold days of winter, they die, sometimes partially, and often wholly. To prevent such accidents, some bee-keepers use chaff hives, or hives with double walls, the interior of which is filled with chaff, or with sawdust.

Some other bee-keepers, for winter, lodge every one of their hives in a large box furnished with a passage for bees. We have tried both systems. Bees, in such hives, do not feel the cold days, but neither do they feel the warm days, and cannot take advantage of the warmth to fly out and get rid of their feces. We prefer to protect our hives during winter only, against the northern winds. Our method is to heap around each hive a pack of dry leaves or straw, which is kept against the hives, on three sides, with rope ladders, each of which is made with about twelve half laths, leaving the front side of the hive free, so as not to prevent the sun from warming the entrance during the few warm days of winter.

By the way, I should warn the young bee-keepers against the idea of transporting their hives to some warmer places just before winter. One of our neighbors has lost nearly all his colonies in consequence of this unadvisable change of place. Most of his colonies perished, and the others were greatly weakened, for the old bees, accustomed to fly from the hives without looking backward, return to the old place where they used to be, and are lost.

I should add that, before winter, we remove the air-tight ceiling which covers the top of the frames of our hives, and replace it with a straw-mat on which we heap up dry leaves. The dampness produced by the bees passes through the mat and condenses in the leaves, which are wet by spring, while the inside of the hive is very dry.

By the means expounded above, bees can sustain a long sequestration without too much loss and suffering.—*Prairie Farmer.*

Hamilton, Ill.

SEVERE DROUTH—BEE-EXPERIENCES, ETC.

BY THEO. F. CRAIG.

We have had some very dry weather for nearly a month, and everything is nearly burned up. Pastures are almost entirely burned. White clover was nearly a failure. Bees are gathering pollen now from pumpkin and cucumber vines and corn-tassels. Most of the catnip is nearly dead. My bees have been working very busily on it for some time.

We have had a very peculiar season. Our bees began carrying in pollen on March 7th. Most of March was very warm and nice. Gooseberries, apple trees, and other fruit trees, were nearly in full bloom when at the last of March we had a cold spell which continued a week, and the mercury was down as low as 18° above

zero, and nearly all fruit was killed. The hives were well filled with brood, which was chilled, and nearly half of the old bees died. When the weather did turn warm, there was not much for them to get until poplar bloomed. Then when poplar was in full bloom, and the third week of May, we had a week of cold, rainy weather.

Bees swarmed but little. One of my neighbors got about 100 pounds of honey from six colonies. Most farmers who have bees are getting discouraged, and are letting their bees die for want of care.

I had a peculiar experience with one colony of my bees this summer. About the last of May my Italian colony (I had just one colony of Italians) swarmed, but lost their queen and returned to the old hive. I had the combs from the old colonies which had died last winter, and took the comb from one old hive, and about half of the bees and a frame of brood from another old hive, and put them in a new hive on the old stand, and moved the old hive away. The old colony had a queen-cell, and soon hatched a queen, which soon went to laying and did well.

I also divided two other colonies of black bees and put them on the old comb with a frame of brood each. They went to work, and soon each had a good laying queen. I looked in the hive of the Italian colony in a week, and they had several queen-cells sealed over. In a week I looked in again, and they had begun to tear down the queen-cells. There were a few that were not torn down. I looked in them two or three times for the next month, but did not see any queen. They had filled the hive nearly full of honey.

In about a month I noticed they had eggs laid in the comb. I had begun to think they had no queen, and intended to give them some more brood to rear a queen, when after two or three weeks I looked over them and found the combs full of drone-brood, and several drones hatched out. I found a black queen, as black as black could be, with her wings entirely eaten off. The drones were very small, and black as could be. Now why the black queen was here is something curious, as I positively know there was no black brood in the hive, as the frame of brood was from as yellow Italian bees as I ever saw.

The only way I can think that it came here, was that the other colonies that I had found had reared two queens, and had driven one out which entered the Italian hive. What do some of the readers of the BEE JOURNAL think?

SWEET CLOVER, ETC.—I wish some of the readers of the BEE JOURNAL would give further description of sweet clover— when to sow it, what effect cold weather has on it, how much to sow per acre, etc. We need something that will bloom through the very dry weather we have through July and August. Catnip, cucumbers and squashes furnish the only bee-pasture we have now. It is so dry now that buckwheat will not grow. Otwell, Ind., Aug. 14.

SEASON OF 1894—OUT-DOOR BEE-CELLAR.

BY JOSEPH BEATH.

My bees wintered fairly well last winter, having put 30 colonies in the cellar the last of November, 1893, and took out 28 alive the middle of April, 1894. But several of them were weak, of which I lost 2, leaving me 26. They gathered more honey from apple bloom than I ever knew them to do before. But the freeze the last of May, and the drouth since, ruined our honey crop. I have just examined the bees, and find a very little new honey in the surplus of the strongest colonies. We had a good rain a week ago to-morrow morning—the first real soaking rain this year—in fact about equal to all that we have had before this year. In March, April and May we had only two or three light rains. In June we had three, which made

about two inches of water; then we went from June 29th until July 31st, through all that hot weather without enough to lay the dust. The Government test in Corning reported 2½ inches then, but judging from several pails that were empty the night before, there must have been about five here, six miles north.

There is some buckwheat ¾ of a mile south, just coming into blossom; also some heart's-ease, from which my bees are getting their present supply of honey.

HONEY FOR CURING GRAVEL.—In "Our Doctor's Hints" for July 19th, he says that some authorities assert that the daily use of honey is an infallible preventive of gravel or stone in the bladder, but he cannot verify it from personal observation. Now I wish to say that both my father and grandfather died of the gravel, and that I myself had begun to feel its effects some 20 or more years ago. Soon after, I got a colony of bees, and although I did not eat honey regularly, I did eat more or less as I had a chance to, as my bees increased, and the honey likewise, never dreaming, however, that I was using a cure for the gravel, but after a time it disappeared, and I have never had any signs of it since. Now, to test it, how would it be for all apiarists that have friends afflicted in this way, to induce them to try it and report to the bee-papers as the effects develop, for if it is a cure, not many apiarists should be so afflicted? We must bear in mind, however, that there is nothing that will cure all in this world. The only dissolvent that I can think of for calculus there is in honey is the formic acid. If there is any other, will some of our chemists please tell us what it is.

OUT-DOOR CELLAR OR CAVE.—As some of our bee-friends may want to build an out-door cellar or cave, I will give my experience. Eighteen years ago I built one 8 feet wide and 16 feet long, with ridgepole and side logs, 4 posts under the ridgepole, and covered with white pine 2 inch plank up and down. The plank lasted six years, and then was recovered with the same kind of plank, which lasted four years. I then covered it with burr-oak 2-inch plank that had been seasoned under cover for three years, which is still there. But in about the second or third year I had to brace it by putting plank along the middle of them, supported by more posts, which took up too much of the room.

So five years ago this fall I needed more room, and thought there must be a better way to build it. I then dug another of the same size about 8 feet wide, 15 feet long, and 4¼ feet deep from the level of the ground, and cut slanting in about 2 inches to the foot (the same as the old one). At about 28 inches from the bottom I left a bench or shelf one foot wide on one side and end, for the purpose of setting canned fruit, skimming milk, or any other use it might be put to. I then cleaned off the top of the ground one foot back from the edge of the hole, and took 2x6 16-foot seasoned oak and laid in cement, leaving 6 inches between the inside edge of the plate and hole on each side. I then took 12 sets of 2x8 pine rafters, 6 feet and 3 inches long, and put on the plates, spiking so the end of the rafter was even with the outer edge of the plate. I then took good inch rough pine boards and covered it, boarded up the ends, put in a ventilator, and covered the whole with cement one inch thick, mixed one of cement to 3 of coarse sand. I used common cement, but would use Portland if to do again. I threw the dirt on as soon as the cement was barely set.

I then took one-half barrel of lime and made a kind of grouting of fine gravel and coarse sand, and spread it 1½ inches thick all over the bottom, so thin that the water stood all over it. I smoothed it off, and let stand until I could walk on it. I then put a strong inch of cement, mixed one of cement and two of sand, and covered the whole sides, benches and everything up to the roof of the same material about

three-eighths of an inch thick ; this makes a cellar as clean as a house, and a floor as solid as a rock.

The whole cost, including labor at the time, was a little over $30. Pine lumber, $20 per thousand feet, oak, $50, and cement $3 per barrel. I have waited five years to find out what failures there might be in it, if any. Well, two years ago last February the ground was thawed out here, and we had a very heavy rain which turned into a freeze, and it went below zero for several days, which cracked the cement on the roof in a place or two, and the following spring it leaked some, so that there were several moldy spots on the roof. I cleaned them off, and it is as clean to-day as the inside of any building that has been built that long. There is a crack in the cement on the straight side, and one on the rear end, but they do not appear to get any larger, and no signs of the boards rotting so far. My wife has sometimes piled boxes of canned fruit, two or three high, on the benches. The cement was put directly on the dirt (being common prairie soil), but it must be damp for it to stick.

Now, what changes would I make if I were going to build again ? Prof. Budd says that four years ago they built two caves at the Agricultural College—one was covered with two thicknesses of white pine one inch thick, which has rotted down ; the other just the same, only the boards were soaked in a strong solution of salt and lime, which is good yet. So I would treat all soft lumber to a similar solution. I would also use 12-inch plates to put the rafters on, and board and cement solid to and over it. I would also make it one foot wider, as it gives more clear room in the bottom, but the rafters must be made stronger in proportion, as one of mine where there was a knot cracked this spring. I simply spiked another on its side. I have an upright door close to the side at the south end, and two small slanting doors at the top, with 2x6 inch sides for stairs, and loose 2x10 in the steps, so we can take them up to clean them.

Corning, Iowa, Aug. 6.

BEING ANGRY WITH DR. MILLER.

BY REV. W. F. CLARKE.

I did not intend to refer again to my little controversy with Dr. Miller, being quite willing that a man so full of words should have the last word after fully conceding my right to hold my own opinion, which was all I was contending for. But I cannot let the homily read me by John F. Gates, on page 216, go unnoticed. Mr. Gates accuses me of being angry with Dr. Miller; not only so, but he takes it for granted that I was angry, and exclaims with deep regret and much self-complacency: "What a pity he should get angry so much ?"

I deny the "soft impeachment." I was not angry with Dr. Miller, but I felt hurt at the pertinacity with which he hounded me about the sting-trowel theory, and the apparent vindictiveness and intolerance of spirit he manifested. In his last letter he professes to be greatly relieved that I only held my view of the sting-trowel process as a matter of opinion. That this was a new discovery on his part is quite sufficiently disproved by his own constant references to it as the "sting-trowel *theory*," and also by my having invariably put it forth as an opinion merely, except in my "Bird's-Eye View of Bee-Keeping," in which I naturally embodied my own opinions, and in regard to which he once himself admitted "license of poetry" as an excuse. But, no ; he put before me no alternative but to prove my theory or own "that there never was any basis except a vivid imagination" for it. I had long before stated the reasons which led me to think the bees used their stings in cell-finishing, so that Dr. Miller's demand was, purely and simply, that I should own

that my theory had no basis except a vivid imagination, This I could not truthfully do, and I resented the demand as a piece of intolerance.

I think Dr. Miller has never accepted Mr. Heddon's pollen theory. At any rate there are many first-class bee-keepers who have not accepted it, but no one of them has ever called on Mr. Heddon either to prove it or own that it never had any basis except a vivid imagination. Why was I singled out as the victim of an intolerant demand? I don't know, and am at a loss to conceive.

I have a high respect and warm love for Dr. Miller, but, like the rest of us, he has faults and failings, of which I have been frank enough to remind him when I thought it necessary. I do not care for a friend who will not tell me of my faults, and I cannot be such a friend to any one. There is an old proverb that he or she is your best friend who tells you of your faults, and the Book of Books declares: "Faithful are the wounds of a friend, but the kisses of an enemy are deceitful."

While on this point I will say that I think Dr. Miller has done me an injustice by not recording his satisfaction among the "Stray Straws" in *Gleanings*. It was a quotation from them in the AMERICAN BEE JOURNAL to which I replied. I did not write to *Gleanings* because the Roots treated me with great injustice on the tobacco question, and also because they rejected the last two articles I sent them. There is a Mutual Admiration Society among bee-keepers; I do not belong to it, and don't want to.

One word more. Mr. Gates assumes that all anger is wicked. I put against that idea two passages of Scripture—Mark 3:3: "And when he (Jesus Christ) had looked round about on them with anger," etc. Eph. 4:26: "Be ye angry and sin not." There is an anger that has no element of sinfulness in it. It is a duty, under certain circumstances, to be angry. When God asked Jonah, "Doest thou well to be angry?" the question implied that if there was just cause for anger, Jonah was not sinning.

Guelph, Ont.

[We think the foregoing discussion has gone far enough, and further "war of words" would be simply a waste of space. But as to there being a "Mutual Admiration Society" existing among bee-keepers, we must confess we hadn't thought of it at all, or heard of it before Mr. Clarke mentioned it. We hope it may turn out to be only one of his many "opinions"—like the "sting-trowel theory," for instance.—EDITOR.]

Los Angeles County Convention.

BY DR. G. A. MILLARD.

The Los Angeles County Bee-Keepers' Association met in the Chamber of Commerce Rooms at Los Angeles, Calif., on Aug. 6, 1894. The meeting was called to order by Dr. G. A. Millard, and Mr. Burgk was elected President *pro tem* in the absence of the President, Prof. Cook.

A NEW BEE-DISEASE.

A communication was received from J. A. Oderlin, of Santa Ana, inquiring as to the cause of his bees dying. According to the description given, his apiary seems to be infected with the new disease, as yet unnamed. Mr. Heart, inspector for this county, reports the disease as resembling foul brood in appearance, but decidedly *not* foul brood; as being prevalent in the northern part of the county, and as being in every apiary in the county so far as he had inspected.

Mr. Jas. Janes stated that a year since he had found the same in his apiary, and treated it by removing old, infected brood, and replacing it with new brood from healthy colonies, and it has not reappeared.

An article was read giving starvation as the cause, but this seems to be a mis-

take, as members present, including Inspector Heart, Mr. Janes, N. Levering, E. E. Shattock, and others have observed it where stores were plentiful. It was also stated that in the central portion of the State, where a fair yield of honey was found this year, this disease was also plentiful.

Mr. Heart's experience is, that as hot weather increases this trouble diminishes.

Mr. Shattock found last year, in his apiary, what on casual observation he pronounced foul brood. He marked the hive, intending, after going through his apiary, to attend to this one, but being very busy he did not get around to it for two weeks, and on opening it for foul brood, he found no trace of it, the bees having cleaned up, and were doing nicely. He was puzzled over the matter, but now concludes it must have been this new disease.

At the afternoon session, a communication by Pres. Cook was read by the Secretary, taken from the AMERICAN BEE JOURNAL of Aug. 2, 1894, recommending feeding for bee-paralysis. Mr. Heart does not agree with the idea, as cases coming under his observation, when feeding had been resorted to, resulted with no benefit. Mr. Heart describes the new disease as follows: Brood dies at about eight days, and when first dead *looks* like foul brood, but lacks the gummy or stringy consistency, and does not have the smell of foul brood.

The writer concludes, from testimony presented, that this is not so *new* a thing as at first supposed, but has been with us before this season, and as cold weather seems to favor its development, and this season having been unusually cold, it has increased to a remarkable degree, and we hope, with the advent of a more favorable season, the disease will diminish or die out. However, the carrying through winter will be of considerable importance, even with California bee-keepers this year.

THE SUPERS IN WINTER.

"Is it better to remove supers with combs for the winter?" was asked.

Mr. Burgk advised taking off supers so as to leave smaller space for the bees to keep warm during cold weather. Store the supers in a cool place. If the super is not removed, and the colony not strong, place a quilt of waxed cloth over the brood-chamber to retain the heat there. The waxed cloth is made by running muslin through melted wax. Mr. Shattock suggests muslin oiled with lard as being just as good.

SMOKERS AND FEEDERS.

The bee-smoker suggested and known here as the "Shattock smoker," was recommended. It can be hung on the windward edge of the hive, with the nozzle just above the edge of the brood-chamber, when the wind carries a light smoke across the top of the frames, which is usually sufficient to keep the bees quiet.

Feeding, this season, on account of drouth becomes an interesting question. Mr. Burgk's feeder consists of a frame (such as used in the hives of the apiary) sided up so as to hold syrup. Fill and place a beveled edge float on top of the syrup, from which the bees take it up. When empty, refill.

A feeder suggested by Mr. Janes, is a glass jar inverted in a tin lid, with thin honey for fall. But for hot weather, a common tin fruit-can with top removed, and filled with syrup. Use a float of ⅛-inch block with beveled edge, or ½-inch holes—smaller holes will trap the bees.

To fill the feeder, take a 5-gallon can with a screw top, and attach at the bottom a small faucet connected with a rubber hose. Let your assistant lift the cover of the hive, place the end of the hose in, and fill the feeder, then pass on to the next. Before using the float, soak it over night in water. Floats should be washed occasionally, as they may become coated.

TARE FOR EXTRACTED HONEY.

The weight of cans, in selling honey, was considered. Mr. Levering refused to allow a deduction (tare) for weight of cans, and his honey has been accepted so far this season in that way. It is urged that all bee-keepers stand firm in this matter, and there will be no need of losing as heretofore. When the apiarist buys a can of lard, the weight of the can is never deducted, nor the wrappers around his tea and coffee, but generally he pays well for the fancy wrapper.

Although the attendance at this meeting was light, there was no lack of interest, and all present felt that "it was good to be there." The convention then adjourned until the first Monday in September, 1894.

G. A. MILLARD, *Sec.*

Los Angeles, Calif.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Best Year He Ever Saw.

My bees are still booming up. This is the best year for honey that I ever saw in this part of Texas.

I am very much in love with the AMERICAN BEE JOURNAL, and don't want to be without it. I wish it much success in the future. S. F. OZBURN.

Meridian, Tex., Aug. 29.

Everything Full of Honey.

I have taken 3,136 pounds of honey to date, with enough more ready to take to bring the last extracting up to 1,100 pounds—the same as each of the first and second extractings, if not more. Tired? Oh, I am so tired working with the honey! I got all my vessels full. Notwithstanding the terrible drouth we have had, the bees are still bringing in some honey. We have never had a complete failure here since I have been in the business. Last year was the nearest, and then I got 1,666 pounds, and sold it at 12½ cents per pound.

MRS. S. E. SHERMAN.

Salado, Tex., Aug. 25.

Feeder for Inside the Hive.

On page 182 I notice an article written by Edwin Bevins on how to feed bees inside the hive. I will give my plan for feeding inside. I have tried various ways, but none suits me as well as the following:

I take a brood-frame, make the joints true with a sharp plane, then I nail on each side a board ¼-inch thick. I leave the board rough on the inside so the bees can get a better hold with their feet. I cover about ¾ of the depth of the frame, and that will hold from 3 to 10 pounds of honey, according to the size and length of the frame. That makes a narrow trough. I then take out one frame of comb near the back of the hive, and hang the feeder in the place of the comb.

I have used this feeder for a number of years, and have fed over 1,200 pounds in the last three years. Put the feeders in with the honey between sundown and dark, and there is no trouble about robbing. I fed 900 pounds one winter in this way, and did not lose a single colony, and there was no trouble with drowning bees. H. C. WHEELER.

Winchester, Calif., Aug. 27.

About 80 Pounds per Colony.

My crop of honey this year will hurry 80 pounds to the hive. It is not yet all off the hives. The brood-chambers were contracted to ⅜ the size of a 10-frame Langstroth. Then I fed extensively before the harvest, and kept prolific queens in all hives. C. W. DAYTON.

Florence, Calif., Sept. 1.

Sulphur a Cure for Paralysis.

About July 3rd, I discovered that 2 of my 12 colonies of bees had bee-paralysis very bad. Both the colonies were of a very shiny black color, and all the young bees of both colonies were affected the same way, and were also dying very fast. I took one ounce of flour of sulphur for each colony, and put the sulphur in a tin pepper-box, gave the bees a little smoke, then opened the hives and shook the sulphur all over combs, bees, brood, and all over inside of hive, closed it, and in 8 days I found that the bees were all cured of bee-paralysis, and at this writing the two colonies are strong in bees, and are storing honey in the sections.

I send the above information for the benefit of those whose bees are troubled as mine were. The sulphur is a sure cure, if you give them enough. Thanks to the discoverer of the same.

WM. H. DERHAM.

Rockford, Ill., Aug. 27.

Had a Good Honey-Flow, Etc.

Our honey-flow in this part of the country was good—one of my colonies stored about 75 pounds of comb honey, and others did exceedingly well. Swarming! Well, one swarm was all we had. Others had more by letting them swarm for the second and third time.

We found one bee-tree this year so

far, and it was only about 100 yards from the house. We felled the tree, secured about 20 pounds of nice honey, and a very large colony. We saved all the comb and brood, and have a good colony now. I think we can find another tree if we look for it, as we got a good course from the tree we cut.

Mr. Chas. Kirschman also found a bee-tree but he got no honey, neither did he save the bees. He hived them, but they came out and left.

Next year I will try putting hives with old combs in the woods, as others were quite successful in catching swarms that way.

The bees in this part of the country are all blacks and hybrids, except mine. I have some Italians, hybrids and blacks, but the yellow Italians are my choice.

The AMERICAN BEE JOURNAL is indeed a welcome weekly visitor, and from its pages I learn many a lesson. Bee-keepers of Missouri, read the BEE JOURNAL, and send in the reports of your honey crops, and how your bees did this year. Let it be good or bad, it is always worth mentioning, so that we may hear more from our Missouri bee-keepers. F. N. BLANK.

Prairie Home, Mo., Aug. 25.

Rain Needed for Fall Flow.

The spring was wet and cold, and frost killed nearly all the fruit blossoms. I lost quite a number of colonies by spring dwindling. White clover came in good, also basswood, which gave the bees a good start. We had quite a number of showers this season, but it is getting very dry now. If we do not have rain soon, the fall flow will be light.

Gillett, Wis., Aug. 30. R. HOWELL.

"Washington Flax" as a Honey-Plant

I find in this State, growing wild, and generally coming where logging camps have been, or slashing of timber has taken place, a flax called here "Washington flax." The Indians, from this plant, make a good thread, very strong, more durable, and of a superior quality to our domestic article. The plant grows about as high as one's head, and has more the appearance of hemp in its growth than of flax. The flower is a purplish red, and is good for bees, because it continues so long, and at the very times the bees need it. It continues here until late in September, the flower is rather plenty. I mailed you yesterday a sample of the seed, and I urge bee-men and agriculturists to give it a trial. I know from experience that it is a superior honey-producer, and believe it can be made profitable as a flax.

Who knows but this is the beginning in the introduction to civilization of a plant heretofore untried, which can produce our food and clothing, thereby aiding in settling partially the vexed tariff question? If our own people in this State would raise their own food, produce, make and wear their own cloth, the tariff question would settle itself.

Any of our bee-men sending postage will be mailed some of the seed this season, if application is made before it is gone. R. H. BALLINGER.

Port Townsend, Wash., Aug. 25.

[The sample was received all right. Thank you. We are always glad to learn of new honey-plants that *are honey*-plants; and of course if they can at the same time be utilized in other ways, so much the better. We trust that so far as possible the new plants may be tried, and reports given thereon. Bee-pasturage must be secured by planting specially, if the natural resources are insufficient.—EDITOR.]

Nucleus Plan of Introducing.

Some one has said that queen-bees are more easily introduced when the colonies to which they are to be introduced are in a prosperous condition. But such has not been my experience. Colonies usually rear drones when prosperous, and I have found it more difficult to introduce a queen to a colony with drone-brood than to one without it. I have always found it less difficult to introduce queens to full colonies early in the spring, before the bees have built up, and late in the fall, after they have ceased brood-rearing, than at other times.

When bees are so prosperous as to think of swarming, which they usually do when they are rearing drones, I refrain from trying to introduce to them a queen under any of the ordinary plans. The nucleus plan will work well at any time, and if I had a valuable queen to introduce at a time when my bees are prospering, I would use the nucleus plan. H. F. COLEMAN.

Sneedville, Tenn.

Honey & Beeswax Market Quotations.

ALBANY, N. Y., Sept. 5.—There is beginning to be more call for honey and receipts are higher as yet. While there is no doubt a moderate crop there is also a lack of money with the consumer to pay high prices, and we don't look for fancy prices. We quote: White comb, 14@15c.; mixed, 12@13c.; dark, 11@12c. Extracted, white, 7@7½c.; mixed, 6½@7½c.; dark, 6c. Beeswax scarce, 28@30c.
H. R. W.

BUFFALO, N. Y., Sept. 7.—The demand for honey as yet is moderate, owing to the liberal supply of fruit, etc.; as soon as these early fall fruits are done we anticipate quite an improvement and good demand. Few sales of fancy No. 1 comb are being made at mostly 12c., occasionally 14c. B. & Co.

NEW YORK, N. Y., Aug. 11.—Our market is well stocked with all kinds of extracted honey, and trade is quiet. We quote: White clover and basswood, 6@6½c. a pound; Southern, 50@65c. per gallon, according to quality. A few lots of new comb honey arrived, but the trade on these goods has not opened as yet. In two weeks we will be able to make prices. Beeswax is quiet at 26½@27c.
H. B. & S.

CHICAGO, ILL., Aug. 23.—Choice lots of white comb honey are selling at 15c. per pound. The demand is not at all brisk. Extracted brings 5@7c., as quality, flavor and package warrants. As yet little dark comb is offered, and it does not sell at over 10c. Beeswax, 25c. R. A. B. & Co.

KANSAS CITY, MO., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Aug. 23.—We have had a few inquiries for new comb honey; also have had some small shipments of new crop. Demand is as yet limited, but expect a good opening. The weather is too warm yet and the consumption is hardly begun yet. Prices now ruling would not be a criterion of what the prices will be when the season has fairly opened. We quote: 1-lb. clover—fancy, 14c.; fair, 12@13c.; mixed, 10@11c. Extracted is in better demand for manufacturing purposes. Southern, 50@60c. per gallon: Northern, 5@7c. per pound. Beeswax, 25@28c.
C. I. & B.

CINCINNATI, O., Sept. 8.—There is a good demand for comb honey at 14@16c. a pound for choice white, in the jobbing way. Demand has been fair for extracted honey at 4@6c. a pound on arrival. Supply is good. It is unwise counsel to bee-keepers "to hold on" to their honey. Our experience of the past is ample proof that comb honey brings the best prices from September on, while the market is not yet overstocked. The reverse has always been the case about Christmas time, and "holders-on" were disappointed. Our experience of the past will repeat itself this year, as usual.

Beeswax is in good demand at 20@25c. for good to choice yellow. C. F. M. & S.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C F. MUTH & SON, cor. Freeman & Central avs.

Convention Notices.

UTAH.—The Utah bee-keepers will hold their semi-annual convention on the Oct. 4, 1894, at Salt Lake City, Utah. JNO. C. SWANER,
Salt Lake City, Utah. Sec'y.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

MINNESOTA.—The second meeting of the Southern Minnesota Bee-Keeprs' Association will be held at Winona, on October 1st, in the Board of Trade rooms, commencing at 10 o'clock a. m. E. C. CORNELL, Sec.
Winona, Minn.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

THE NORTH AMERICAN B.-K. A.—The Quarter Centennial Meeting of this Society will be held at St. Joseph, Mo., on Oct. 10, 11 and 12, 1894. It is the first convention of the North American Association beyond the western bank of the Mississippi, and large delegations from the great West will be present. We hope the East, the North and the South will gather with them. FRANK BENTON, Sec.
Dept. Agriculture, Washington, D. C.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 352 for advertising offer.

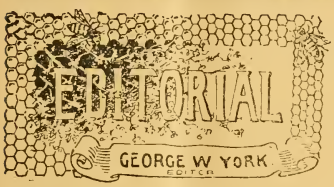
ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Sample Copy Free.

VOL. XXXIV. CHICAGO, ILL., SEPT. 20, 1894. NO. 12.



Bro. G. K. Hubbard and wife, of Ft. Wayne, Ind., left last week for Riverside, Calif., where Mrs. H. finds increased health and strength. She has been an invalid for several years, but California climate helps her wonderfully. We hope she may speedily be restored to vigorous health.

To Remove Propolis from the hands is quite a job unless you know how. Bro. Holtermann, in the *Canadian Bee Journal*, says: "We pour a little coal-oil in the palm of the hand, and rub it well over the parts soiled. The oil readily removes the substance. Wash well after applying the oil, rubbing with soap and cold (or better warm) water, and your hands are clean."

The C. B. & Q. Railroad is the *best* one to take when going to the St. Joseph, Mo., meeting of the North American. Please don't forget this. Also remember that the convention will be held Oct. 10th, 11th and 12th. The "Harvest Excursion" on all the roads east of the Missouri river starts on Oct. 9th. If you want to ride on the best road to St. Joseph, *be sure* to take the "C. B. & Q."

The National Museum at Washington, D. C., contains some bees, it seems, though not live ones. A writer in the *Western Rural* says this about it:

While passing through the National Museum, in Washington, D. C., the other day, my attention was attracted by a case containing 12 small vials. These were filled with a black liquid, and in each was a small insect. Closer examination proved that in this small case was a condensed history of our honey-bee. The vials were divided into three rows; one being made up of those containing the worker-bees; the second contained the queens; and the third the drones. The vials in each division showed the bees in four stages of development—the egg, the larvæ, the pupa, and the imago, or fully developed bee. The mature insect must have passed through all these stages. It is interesting to study the bees in these different conditions.

North American Delegates.—Pres. Abbott is becoming more enthusiastic about the future of the North American Bee-Keepers' Association than if a whole colony of properly aroused Cyprian bees were after him. That's a good sign. We need more enthusiasts on this line. Here is what Bro. Abbott says now:

THE FUTURE OF THE NORTH AMERICAN.

Rev. W. F. Clarke, in his address at the Keokuk meeting had the following to say on this subject:

"I have only one word more to say about the future of this Association. It needs to assume a more representative character. All along, during the course of its history, we have tried to give it this feature. The only defect in this meeting has been that there were so few 'wise men from the East' here. The distance is too great for many whose hearts have been with us, to bear the expense of the journey.

"I say frankly, that but for the generous kindness of my fellow-members of the

Ontario Bee-Keepers' Association, I should have been absent—no great loss, perhaps, except to myself. But I want to hold up the body I represent as an example in this respect. We are going to send at least one delegate every year, and pay his expenses, even if the Association meets as far away as California. I think I may venture to tell you, as a little 'tale out of school,' that hereafter when a bee-keeper fills the presidential chair among us for a year, he will not 'step down and out,' but will be invited to step up and out, by being appointed our delegate to this convention. Is not this an idea worth adoption, at least by every State, Provincial and Territorial association? I think it is, and I would express the hope, in closing, that this body, while retaining all the good qualities it has had in the past, will, in the future, be more thoroughly and largely representative of the bee-keeping fraternity, and in all parts of North America."

In commenting on this address, Thomas G. Newman said:

"In order to make this Association truly representative, in fact as well as in name, it is necessary that all local, State and Territorial associations should send delegates to every convention. We want to see the society extend even as far as California, and have representatives of that large honey-producing country attend our meetings. But in order to do so, they must come as representatives, and their expenses be paid by the societies. No one individual could afford the outlay for himself alone. But for the many it is easily accomplished. Able representatives would be willing to give their time to attend these assemblies, but all representatives should have their expenses paid by the local societies."

This is in line with what I said in a former article. Can we not have at least one representative from each State? Friend York suggests that California send Prof. Cook. I second the motion, and at the same time move that Massachusetts send Henry Alley from the other side of the Continent. Do I hear a second? EMERSON T. ABBOTT.

St. Joseph, Mo., Sept. 6, 1894.

Yes, Bro. Abbott, we'll be one to second the motion that Henry Alley be sent as a delegate to the meeting at St. Joseph next month. We hope there may be a large number of delegates present from all over the country. Prof. Cook from California, and Henry Alley from Massachusetts! Well, that's almost as far apart "as the east is from the west." It would do Bro. Alley good to rub up against our Western hustle, and also sniff the pure ozone of our boundless prairies. Come on, Bro. A., and bring a whole "special car" full of Eastern bee-keepers with you?

Have You Read page 383 yet?

The Constitution and By-Laws of the North American Bee-Keepers' Society have been asked for, so we have concluded to place them before our readers this week.

It seems that at the convention held at Columbus, O., Oct. 3, 4 and 5, 1888, a new Constitution and By-Laws were adopted, but at the meeting in Keokuk, Iowa, Oct. 29, 30 and 31, 1890, the Constitution was rewritten for the purpose of incorporation, was adopted, and now stands as follows:

Constitution of the N. A. B.-K. A.

ARTICLE I.—NAME.

This organization shall be known as "The North American Bee-Keepers' Association," and shall include in its territory all of the United States and Canada.

ARTICLE II.—OBJECT.

Its object shall be to promote the general interests of the pursuit of bee-culture throughout North America.

ARTICLE III.—MEMBERSHIP.

1. This Association shall consist of its officers, life members, annual members, honorary members, delegates from affiliated local associations, and ex-presidents.

2. Any person interested in apiculture, may become a Life Member upon the payment to the Secretary of the sum of ten dollars, and receiving a majority vote at any annual meeting of this Association.

3. Any person interested in apiculture, may become an Annual Member upon the payment to the Secretary of one dollar. Ladies interested in apiculture may be admitted free.

4. Annual Members shall be entitled to vote, hold office, and discuss any question before the Association.

5. Any person may become Honorary Members by receiving a majority vote at any regular meeting.

6. Delegates from affiliated local Associations shall be admitted free, and have all the rights of annual members.

ARTICLE IV.—OFFICERS.

1. The officers of this Association shall consist of a President, 1st Vice-President, Secretary and Treasurer, and their term of office shall be one year, or until their successors shall be elected and qualified. These officers shall constitute the Executive Committee.

2. The Presidents of all the local Associations, in affiliation with this Association, shall be *ex-officio* Vice-Presidents of this Association.

ARTICLE V.—AFFILIATION.

Any State, District, Territory or Province in North America may become affiliated with the "North American Bee-Keepers' Association" upon the annual payment of five dollars, which shall be due on the first

day of January in each year, in advance for the calendar year.

ARTICLE VI.—MEETINGS.

Its principal place of business shall be at Chicago, Ill., and the annual meeting of this Association shall be held at such place as shall be agreed upon at the previous annual meeting. Ten members shall constitute a quorum for the transaction of business, but a less number may engage in discussion, and adjourn until some future day.

ARTICLE VII.—VACANCIES IN OFFICE.

Vacancies in office, by death, resignation, or otherwise, shall be filled by the Executive Committee, until the next annual meeting.

ARTICLE VIII.—AMENDMENTS.

This Constitution may be smended at any annual meeting by a two-thirds vote of all the members present.

The "By-Laws," we believe, have not been amended since their first adoption at Columbus, O., in 1888, so we copy them as follows from the published "Report" for that year:

By-Laws of the N. A. B.-K. A.

ARTICLE I.—The officers of this Association shall be elected by a majority ballot; or, if so decided, by a vote of two-thirds of those present, the officers may be elected by a show of hands.

ART. II.—It shall be the duty of the President to call and preserve order in all meetings of the Association; to call for all reports of officers and standing committees; to put to vote all motions regularly seconded; to decide all questions of order according to the Constitution and By-Laws of the Association, and in accordance with parliamentary usage; to provide for counting the votes at all elections; and at the expiration of his term of office, to deliver an address before the Association.

ART. III.—It shall be the duty of the 1st Vice-President (or in his absence one of the other Vice-Presidents), in the absence of the President, to perform the duties of that office.

ART. IV.—It shall be the duty of the Secretary to call the names of the members of the Association at the opening of each annual meeting, and to receive the annual dues; to report all proceedings of the Association, and record the same, when approved, in the Secretary's book; to conduct all correspondence of the Association, and to file and preserve all papers belonging to the same; to take and record the name and address of every person who becomes a member of the Association, and transfer the moneys received for dues to the Treasurer, after taking his receipt for the same; to make out and publish annually, as far as practicable, a statistical table showing the number of colonies owned in the spring and fall, and the amount of honey and wax produced (together with such other information as may be deemed beneficial) by each member of the Association; and to give notice of all meetings of the Association in all the bee-papers, at least four weeks before the time of such meeting.

ART. V.—It shall be the duty of the Treasurer to receive from the Secretary the funds of the Association, and give a receipt for the same; to pay them out upon the order of the Executive Committee, and to render a written report of all receipts and expenditures of the Association at each annual convention.

ART. VI.—The Secretary shall have power to choose an Assistant-Secretary if deemed necessary.

ART. VII.—The Association shall be mainly governed by the following order of business:

Call to Order.
Calling the Roll of Officers and Members.
Reading the Minutes of the Annual and Special Meetings, if any.
Reception of New Members and the Collection of Annual Dues.
Secretary's Report.
Treasurer's Report.
Report of Standing Committees.
Reports from Affiliated Societies.
President's Address.
Election of Officers.
Selection of the Time and Place for Holding the Next Convention.
Miscellaneous Business.
Discussion of Apicultural Topics.
Installation of Officers.
Adjournment.

ART. VIII.—1. A committee of five may be elected, who shall have power to organize itself into a "Honey Company," and its duties shall be to inaugurate plans for the marketing and sale of the products of the apiary. Every member of the North American Bee-Keepers' Association, and its affiliated branches, shall be entitled to the benefits of the Honey Company, subject to the terms of its By-Laws.

2. This Honey Company shall make annual reports of the state of the market, amount of business done, and of its financial condition, to the annual convention of the North American Bee-Keepers' Association.

ART. IX.—1. The Secretary of each local affiliated society shall, through its Secretary or President, on the first day of August in each year, report to the Secretary of the North American Bee-Keepers' Association, the number of its members, stating the aggregate number of colonies of bees in their apiaries in the previous fall, the number in the spring, the increase since, and the approximate number of pounds of honey produced (stating comb and extracted separately), and any other desirable information concerning the probable honey-production of those not members of the society, but within the territory of the affiliated local association.

2. If the annual affiliation fee be not promptly paid, and the local report withheld, the "North American Bee-Keepers' Association" may at any time within one month of the date mentioned, withdraw

the privileges of affiliation, which comprise the following:

(1.) The President of each affiliated society is *ex-officio* a Vice-President of the North American Bee-Keepers' Association.

(2.) It shall be entitled to receive from the North American Bee-Keepers' Association two silver medals, to be offered as prizes for honey, open for competition to all its members, one for the best in the comb, and the other for the best out of the comb.

(3.) The members of all the affiliated societies shall be entitled to the facilities which may be provided from time to time by the Honey Company, for the sale of honey and beeswax, upon the terms stated in the By-Laws of the company.

(4.) Each affiliated society shall be entitled to the services of a judge to award premiums at its bee and honey show, upon the payment of his actual railroad and hotel expenses.

(5.) Each affiliated society shall be entitled to elect one delegate to each 25 of its members, or fraction thereof, who may represent it at the annual convention of the North American Bee-Keepers' Association—all expenses of such delegates to be borne by themselves or the local society, or both conjointly, as they may provide. Such delegates shall be entitled to vote, hold office, and take part in all the deliberations of the North American Bee-Keepers' Association.

ART. X.—A Defense Committee of seven shall be appointed for the purpose of considering the applications of members for defense from unjust lawsuits by those who are prejudiced against the pursuit. This committee shall be the officers annually elected by the National Bee-Keepers' Union, which is hereby declared to be affiliated to the North American Bee-Keepers' Association. Its President is hereby made a Vice-President of this Association, and its General Manager also a delegate to the Annual Convention.

ART. XI.—An Expert Committee of three shall be annually elected and fully empowered to prepare examination blanks, and make all necessary arrangements for the examination of candidates for diplomas as experts in the art of bee-keeping. This committee shall be empowered in the name of this Association, to award diplomas of three grades upon candidates, according to their proficiency in the art of bee-keeping, and the management of an apiary.

ART. XII.—1. The Executive Committee of this Association shall cause the Constitution and By-Laws to be printed in appropriate form, and every person joining the Association shall be entitled to a copy of the same.

2. It shall also select subjects for discussion, and appoint members to deliver addresses or read essays, and the same shall be published with the call for the next annual meeting.

3. It shall also provide free badges for all members, and procure medals for the honey shows of affiliated associations and diplomas for experts.

4. The Executive Committee shall also provide a place of meeting for the annual convention, and see that all necessary arrangements are made to carry out the demands of the Constitution and By-Laws.

ART. XIII.—No member shall be entitled to the floor more than five minutes in the discussion of any motion, resolution or petition without obtaining the consent of the Association, nor a second time, unless by the consent of the President, or a majority of the members present.

ART. XIV. — All committees shall be elected by ballot, by a plurality vote, except by special resolution.

ART. XV. — These By-Laws may be amended by a two-thirds vote of all the members present at any annual meeting of the Association.

Feed the Bees for winter, if they need it. Don't let them starve, but see to it that they have ample stores to carry them through the cold season, which will soon be here. Also properly protect them from the cold winds and storms that are bound to come in a northern climate. Don't neglect your bees, whatever you may do.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Oct. 1.—Southern Minnesota, at Winona.
E. C. Cornell. Sec., Winona, Minn.

Oct. 4.—Utah, at Salt Lake City, Utah.
Jno. C. Swaner, Sec., Salt Lake City, Utah

Oct. 10-12.—North American, St. Joseph, Mo.
Frank Benton, Sec., Washington, D. C.

1895.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Plzer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

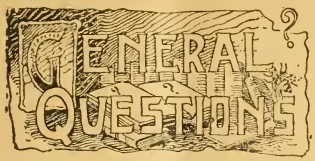
North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

Have You Read the wonderful Premium offers on page 383?



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Fall Transferring.

Would it be well to transfer bees into different hives as late as October 1st?

Lewiston, W. Va. D. S. M.

ANSWER.—Better wait till spring.

Will Extracted Honey Sour?

Will good, thick extracted honey sour? That is, honey that weighs 12 pounds to the gallon. J. V. E.

ANSWER.—Yes, any honey will sour if you keep it in a damp place, unless it's sealed up tight. Honey, such as you mention, ought to keep till your grandchildren are grey, if kept in a dry place, especially if a little warmer than surrounding atmosphere.

Transferring and Italianizing.

I have 11 colonies of black bees in box-hives, and I want to transfer them into the dovetail hive.

Also my stock of bees; I want the best possible honey-gatherers. Can you give the cheapest and surest way, or is it too late to get a full colony of bees that has a lot of drones and drone-comb, so they can rear plenty of drones after my black drones are killed out? I would like to change my stock this fall, and next spring transfer the bees to other hives. C. R. R.

Harden, N. C., Aug. 28.

ANSWER.—It will be of no use for you to get drones this fall. Drones are summer birds and are not kept over winter. One of the first things for you to do is to get a good text-book, and read up thoroughly. With 11 colonies on hand you may save the price of a book a good many times over in a year.

You can get a full colony of Italians this fall, but you'll be about as well off to get them next spring, and then you'll not run any risk wintering them, although I suppose in North Carolina the risk of wintering ought not to be much.

Instead of getting a full colony it might be a cheaper plan to get two or three queens this fall, but there again is the difficulty that your bees are in box-hives, and without much experience you would be likely to make a failure of introducing queens in box-hives.

If you can't get a full colony near by, at a reasonable rate, you can get a nucleus next spring with a good queen.

But now you get a good text-book first thing, and you'll enjoy reading up this winter, and you will work a good deal more intelligently next spring. Two or three books would be still better.

A Colony with Laying Worker.

What is the best thing to do with a colony that has a laying worker? What is the best method to find her in the colony? It's a hard thing, because she is but very little larger than a common bee.

Pflugersville, Tex. E. W.

ANSWER.—Yes, it's a harder thing than you think, to find a laying worker, or else you wouldn't ask how. I don't believe any one can tell a laying worker by her looks, and the only way to identify her is by seeing her at work laying. This, in all the years of my experience, I never saw but once, and it's doubtful if I'll ever see it again.

Generally, the best thing to do with a colony having a laying worker is to break it up, uniting it where it will do most good. Set it over a weak colony having a good queen, having a passage for only one bee between the two, but allowing each its full entrance. In a couple of days enlarge the passage between the two hives, and I think you'll find them unite peaceably. You can also divide it among several colonies.

If anxious to preserve it, give it a frame of brood with adhering bees and a sealed queen-cell. Be sure to report how you come out with it.

What Caused the "Matricide?"

I went to a hive yesterday which contained a select Italian queen which was introduced on July 4th, and which was

received all right and has been laying all right ever since. I noticed outside—dead—a fine, yellow Italian (it appeared to be) queen lying on the ground. As I was apprehensive that possibly something had gone wrong with my queen, I looked in and found her hanging on the bottom-bar of the outside frame with a large "ball" of bees around her—evidently trying to sting their own mother. I smoked two or three puffs into the entrance before I opened the hive, but can see no reason for such behavior.

I rescued the queen and put her on another frame in another part of the hive, and gave the whole business a thorough, good smoking. Can you suggest the reason for such willful and malicious "matricide?" There seems to be lots of pollen coming in, but I cannot tell much about whether there is any honey with it. D. R.

Abilene, Tex., Sept. 4.

ANSWER.—It isn't always easy to tell what a man is thinking about by looking in his face, and it's about as hard to understand bees, sometimes. In spite of the fact that you thought you saw "blood in the eyes" of the bees that you supposed to be on murder intent, I suspect that it was nearly the opposite—simply a grim determination to lose their lives, if need be, in defense of their mother.

Generally, when bees are balling a queen, you may count that it is not from love, but sometimes it is. Let a number of strange bees get into a hive, or perhaps a strange queen, and the bees may form a ball around their own queen to protect her. Where would she be safer than in a ball of her own bees?

Very likely the dead queen you found on the outside had something to do with the case.

Beeswax Not Digestible.

Is beeswax healthful to eat? That is, will the stomach digest it readily?

ANSWER.—Beeswax is utterly indigestible, but I don't know that there's anything unhealthy in eating it in small quantities as we get it in comb honey. Parts of wheat are indigestible, and yet generally wholesome.

☞ Sunday is the core of our civilization, dedicated to thought and reverence. It invites to the noblest solitude and to the noblest society.—*Emerson*.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Something About "Kissing."

What a flood of joy the word implies! Is there a more refined and blissful sign by which to express the affectionate assurances of pure hearts and minds? If so, I can't imagine it. But though kissing is so irresistible and proper to those whom the privilege rightly belongs, *indiscriminate* osculation is one of the most vulgar and dangerous performances imposed by our insincere social customs.

How many have thought of the dangerous diseases that lurk in that veritable "Judas' kiss?" Many deaths have resulted directly from a thoughtless, perfunctory kiss. *Stop and think!* Can you not understand how easily disease may be thus acquired through the heavily laden breath of a typhoidal, diphtheretic, scarlatina or small-pox patient just incubating the disease? Yes, and have you at all considered even the more possible danger of contracting *cancers*, and other easily acquired contagions?

Do you not recall in your former circles of acquaintances a healthy, rosy-cheeked girl who unfortunately married some weak consumptive, that after a few years of affectionate care of him, the husband died, leaving her the legacy of his own disease, she in turn to fill an early grave? Each kiss was to her a drop of poison!

And what do you know of that young man whose lips you are so ready to receive? He may be the verriest rake! His embraces may have been as varied as to character as to frequency! His lips may—nay, no doubt have been—as ready for the diseased courtesan as for the sweet and innocent daughter of an honored home.

What ails that young woman? "What? Doctor, you can't *mean* it! Oh, no; *don't!* You break my heart to assure me of so vile infection!"

"Yes, daughter, it is true. The greeting you so cherished has contaminated you. He was cruelly vile, and has placed his seal of impurity upon you, which your life may not be long enough to obliterate under even the best medical care!" The ulcers

on your lips are plain evidence of constitutional taint.

Who may number the ill results to babies and little children through the promiscuous kissing so many women indulge in, purely out of compliment to the fond mother? It makes my flesh crawl when I notice what I have so often seen, a woman full of decayed and ill-smelling teeth clasp a pure, tiny baby to that horrible mouth, to leave on the innocent lips the moisture from that poison-laden cavity? Is it any wonder that the "sweet little thing" will soon have sores on its tongue and gums? Not to me! It isn't so many years ago when the attempt was frequently made to impose on our little ones in this outrageous manner. Perhaps some succeeded when only their blessed mother stood by—not when *I* was near! Visitors would feel shocked at my supposed incivility, but I felt vastly more interested in my little ones than in their formal ceremonies. They were early apprised of the fact that I did not approve the act from them, and a second attempt was not made.

And so I might proceed in the application of this lesson to older people—women in particular—who feel it their duty to kiss and be kissed by all the acquaintances for miles around. If they will reflect to look and see what cavernous openings they are about to cover with their lips, they must conclude that their sacrifice of feeling and good judgment is utterly wanting, to warrant such an indiscretion. It is not even best for some wives and husbands to attempt the task too frequently, for similar reasons. What nice, clean little woman really cares to kiss the tobacco-stained bristles of a husband's upper lip? Whew! Women, "be ye as wise as serpents and harmless as doves"—but, DON'T!

Home-Made Lemons.

Yes, as good as lemons growing right at your door—is the common sheep-sorrel. For any of the edible purposes for which lemon is used, except in flavor, the sorrel is an excellent substitute. A few plants of it crushed to a pulp, water and sugar added, then strained, makes as fine a lemonade as one wants to drink—during warm days.

It is even more healthful than lemon juice, because not so intensely acid. Add a few leaves of fresh peppermint out of your garden, and you have a "mint-julip" that the oldest Kentuckian might envy.

Sheep-sorrel in your apple-pies gives a more tart and appetizing flavor. And there is nothing that will make tough meat so tender, or that will keep it from spoiling like wrapping it in sheep-sorrel. It garnishes a steak or fish as nothing else can, and persons who chew a little of it are proof against serious thirst. Indeed, there are many more uses for it, had we space to mention.

Convention Notices.

UTAH.—The Utah bee-keepers will hold their semi-annual convention on the Oct. 4, 1894, at Salt Lake City, Utah. JNO. C. SWANER, Salt Lake City, Utah. Sec'y.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895. Madison, Wis. J. W. VANCE, Cor. Sec.

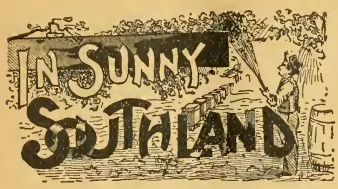
MINNESOTA.—The second meeting of the Southern Minnesota Bee-Keeprs' Association will be held at Winona, on October 1st, in the Board of Trade rooms, commencing at 10 o'clock a. m. E. C. CORNELL, Sec. Winona. Minn.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec. Franklin, Pa.

THE NORTH AMERICAN B.-K. A.—The Quarter Centennial Meeting of this Society will be held at St. Joseph, Mo., on Oct. 10, 11 and 12, 1894. It is the first convention of the North American Association beyond the western bank of the Mississippi, and large delegations from the great West will be present. We hope the East, the North and the South will gather with them. FRANK BENTON, Sec. Dept. Agriculture, Washington, D. C.

"Foul Brood: Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 384 for advertising offer.



CONDUCTED BY

MRS. JENNIE ATCHLEY.

BEEVILLE, TEXAS.

An Experience with Bee-Paralysis.

I see on page 137 of the AMERICAN BEE JOURNAL that Prof. Cook thinks that starvation is partly or wholly the cause of bee-paralysis. Now, I don't like to dispute such good authority on bee-matters as the Professor is, but I know that starvation is not the cause of the disease known as "paralysis" in this part of the country, for I have colonies that have from 50 to 75 pounds of honey now, that are badly affected with that disease, and it is almost always my strongest and best colonies that are affected first. Of course feeding will check it, but it will reappear almost as soon as the feeding is stopped, or if there should come a sudden flow of honey, it will always check it.

I have had this disease in my apiary ever since I came to this county (Lampasas), four years ago, and from what I can find out, it had been here for several years before I came, for several of the old-time bee-keepers told me when I came here that I could not keep bees in this county, saying that the ants and moth-worms would destroy them. All said that the bees would gather lots of honey, but that ants would eat the bees in the summer after the weather became hot, and leave the hive full of honey. But I had come to this country to make bee-keeping a specialty, and would not believe such foolishness, and the ants and moths have given me no trouble, but the disease known as bee-paralysis has, and I am sure it was this disease that was causing the trouble instead of ants and the moth-worms, for I have had several of those old-timers to come into my apiary and say to me, "Why, see here, Smith, the ants are carrying them off?" When the truth was, it was only the dead and sick bees that the ants were carrying off, that had died from that disease.

Mrs. Atchley, I guess it was I whom your Australian correspondent had reference to on page 173, where he says, "It must be a very prevalent disease in your country, if more than ⅔ of the bees have fallen before it in the last three years," as I wrote words to that effect sometime last year for the AMERICAN BEE JOURNAL. I can't recall the page just now, and haven't time to look it up, but I am sure I wrote nothing but facts then, and I don't know but more than ⅔ have died from that cause alone, in the last three or four years in this part of the country. L. B. SMITH.

Lometa, Tex., Aug. 25.

Friend Smith, the reason I made the remark that I did about Mr. Jones being badly informed about bee-paralysis in this country was, the term you used seemed to implicate the *whole* United States. You said that more than ⅔ of the bees had fallen under bee-paralysis in this country. Now you likely meant your own and adjoining counties, and our brother across the waters took your statement as the whole of this country. There never has been a case of bee-paralysis in south Texas that I know of, and you are about 300 miles northwest of me, and as there is none in this part of Texas, it surely does not extend far from your county (Lampasas). I think we should be particular about describing certain localities when speaking of *diseases* among bees, especially as it is likely to injure some friend, when nothing of the kind is intended.

Try the sulphur plan on bee-paralysis, and report. JENNIE ATCHLEY.

A Bee and Snake Story.

The boys went out deer hunting a few days ago, and Charles found some bees watering in a knot on a tree, and he traced them to their hive very soon, and found them in a small live-oak tree, scarcely larger than a common candy jar. The bees went in about 3 feet from the ground. Well, the boys were in a "bad box," as they call it. They had no smoker, nor anything that they could smoke bees with, and they feared that if they left the spot without taking the bees, they would likely not find it easily again, as it is very thickly wooded. So when Willie came up, they concluded to tear the left pocket out of their pants (as they could best spare that one), and made a smoke, the moss and rotten wood being wet. They blew in smoke at the entrance, and cut the tree above and below the bees, put their coats in

the ends of the chunk, and moss in the entrance, laid the treasure in the buggy, and brought it home and transferred it —a nice colony of Italian bees.

There was a snake about 8 feet long that also lived in the tree with the bees. It was coiled right on top of the combs, and the bees clustered all over it, and it seemed to be quite at home. The boys said it seemed a pity to break the poor snake up in the bee-business, but the tempation was too great for them, so they killed it and took its bees.

JENNIE ATCHLEY.

Appreciates the "Lessons," Etc.

MRS. ATCHLEY:—After reading your instructive lessons in the AMERICAN BEE JOURNAL, I must thank you for them. We have 1,400 colonies of bees, but no honey this year. We will have to feed heavily. J. B. ROBERTS.

Wewahitchka, Fla., Aug. 24.

Friend Roberts, I am glad indeed to know that you are interested in my lessons. I hope I shall be able to help many bee-keepers along with their bees. I make my bees my pets and companions. I truly enjoy their society. What I do, or what work I perform among them, is a labor of love. They seem to vie with themselves as I pass by, to exhibit to me their beauties, and energy and usefulness to mankind; and whenever I can help some one else along in this our chosen and loving pursuit, I cannot but feel happy.

I hope you may yet get some fall honey, and not have to feed as much as you anticipate. JENNIE ATCHLEY.

Swarming With No Drones.

Query 941.—Will a colony swarm if there are no drones in the hive?—Arkansas.

Yes.—P. H. ELWOOD.

Yes.—S. I. FREEBORN.

Not naturally—J. H. LARRABEE.

I am not sure.—EUGENE SECOR.

I think not.—JAS. A. STONE.

Yes, sometimes.—J. E. POND.

I don't know. I think they may.—C. C. MILLER.

Yes. I have had them do so.—G. M. DOOLITTLE.

I think not, though in this I am not sure.—J. M. HAMBAUGH.

Yes, but a scarcity of drones discourages swarming.—J. A. GREEN.

Not normally. They will leave if there is no honey.—A. J. COOK.

I have had such colonies to do so, though it is unusual.—J. P. H. BROWN.

Yes, if other conditions are right; but such is seldom the case.—C. H. DIBBERN.

I do not know. They are more apt to, where they are plenty.—MRS. L. HARRISON.

Yes, sometimes, if crowded, but not so readily as when drones are in the way.—DADANT & SON.

Yes. I never knew of more than one colony without drones, and that did swarm.—E. FRANCE.

I really do not know, but think so, if there are plenty in the neighborhood. This may be worth investigation.—W. M. BARNUM.

Yes, sometimes. Especially when their fever is high. I have had lots of swarms, and not a drone to be seen.—MRS. JENNIE ATCHLEY.

I have never known a colony to reach the swarming point without having provided themselves with at least a few drones.—MRS. J. N. HEATER.

Yes, if all other conditions are favorable, but they generally manage to secure the drones along with the other favorable conditions.—EMERSON T. ABBOTT.

I have never seen a colony at swarming time, and when swarming conditions were present, absolutely destitute of drones. But I presume that the absence of drones would not, of itself, prevent swarming.—M. MAHIN.

No colony arrives at the swarming state without rearing at least a few drones, and having the few it would swarm; and I think it would just the same if all the drones were caught and killed.—R. L. TAYLOR.

Perhaps it is rare, that a colony is *entirely* without drones at swarming time. But I have had from a dozen to 20 colonies at a time on worker-combs so perfect that they practically had no drones, and these colonies swarmed just like other colonies. The absence of drones does not prevent swarming. If it did, the swarming problem would be solved.—G. W. DEMAREE.

KEEPING PACE WITH THE WORLD.

BY W. P. FAYLOR.

Bee-keepers, as a rule, are an intelligent and progressive class of men and women. Though like every other occupation and profession, we have the careless and indifferent. Those who continue to keep bees after the old slip-shod-box-gum-non-frame-hive-method are gradually growing less, and at present are becoming subjects of ridicule. In no pursuit or business profession of life can a wider field for study and progress be found than right in our little-big profession of bee-keeping. No domestic creature is so little understood by the general public as the useful honey-bee. A man pointed out to the writer recently a hive of bees out of which log-hive had gone some ten or twelve swarms; and yet he supposed that the original queen was still in the old hive! One thing puzzled him, however—that was to know why the old queen was putting forth black bees now, where she had formerly given the yellow type!

First, the invention of the movable frame became a necessity, and has led to still more advanced steps in the production of honey. The comb-foundation mill, the honey extractor, and nice one-pound sections, are all in keeping with the progress of the day. The bee-smoker has proved a great comfort to the apicultural fraternity, as also have many other small inventions.

Pulling a cage of bees and queen-bee out of my pocket in the presence of some elderly people, excited one old lady to her feet exclaiming, "What is it that man won't do?" Well, to tell the truth, there are some things that men won't do, nor women either: They won't always do right; but even children well-informed can cage a queen and attendants, and send them through the mails. You see we differ like other professionists. Some, and a majority, claim that the queen-bee is never injured in the mails. Sometimes we grab the cage from the postmaster to find the queen dead, or just breathing her last. Then, what injured in transit, not according to the majority, but according to Doolittle and others, if a queen arrives dead, she is considered as having been injured; by the majority, not injured, only dead, that's all.

The other day I received a queen from Massachusetts. The queen and every attendant were alive, but one bee tumbled out and died in a short time in front of the hive of young hatching bees. The queen is now laying, and I must say I am thankful for the success of the mailing queen-business.

I see Dr. Miller and Rev. S. Roese are about to dispute about the kind of comb the queen likes best. I am having some experience along that line just now. I have one colony building one new comb, and the queen seems to move down as fast as the bees build the comb, and deposits eggs in cells that are not fully drawn out,

and about four times out of five I find her royal highness on that new comb. In another hive I have placed a new comb made from foundation, and the queen has been laying eggs in combs on both sides of the new comb, that are two or three years old, and passes right by the new for the old. Now, Doctor, if you ask me what kind of comb the queen prefers, I think I might tell the truth by saying, "I don't know." Queens act a little like bee-keepers, anyhow—each seems to have a notion of its own.

2nd. In discussion we are keeping pace with the age in which we live.

3rd. To keep up with the times in any department of life the progressive mind must keep posted. No bee-keeper can expect to keep up with the advance of the age without reading bee-papers and bee-books. A politician would not be a very strong Democrat, Republican, Prohibitionist or Populist, if he did not read some periodical advocating his political faith. "Read and you will know."

4th. We are up with the world in another particular. We now have a honey prophet telling in advance where there will be a honey-flow. Show up the agriculturist who can tell a crop of corn a year in advance! Behold the ships pulling into harbor in expectation of Higgins' prophetic storm, and then the storm not come! Aye, what think you?

5th. Another advance step in our profession is the fact that bee-keepers can mate their queens with the very kind of drones desired, right in a country or neighborhood surrounded with black bees. This has long been desirable.

6th. But the last and greatest discovery in the realms of bee-keeping is the recently discovered method of increasing the size of the honey-bee. That fellow down in Florida ought to receive a gold medal from somebody for this great discovery. Improving the color of bees has attracted the attention of many, now let us turn our attention to the size of the bee for awhile. May be we can yet produce *Apis dorsata* in our own country. What do you say? Updegraff, Iowa.

VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

A "Wormy" Fight.—I see no other way but I must go down to Texas to have that fight out with Mrs. Atchley, to determine whether moth or worm is the right name for the thing that chews up our combs, and eats wood or almost anything down in Texas. Look here, Mrs. Atchley, suppose we have Prof. Cook settle it for us.

Professor, here's one of those dirty white things that gnaw holes in our combs, and Mrs. Atchley insists on calling it a moth. It's a worm, isn't it?

Then the Professor, always a peacemaker, says, "Tut, tut, children; don't quarrel over a thing like that; it isn't a moth, for it hasn't any wings, and it isn't a worm; it's a caterpillar."

Say, Jennie, let's quit quarreling about the wor—no, the moth—no, I mean the caterpillar, and fight about something else.

Dr. Peiro wants *four* sections of my best white honey in return for professional services. All right, Doctor, you come out here and I'll give you all the first-class honey I took this year.

New Things—Non-Swarming.—John M'Arthur is a little hard on some of us that are always trying new things (page 304), but he makes some good points and stirs up thought. He's with the Dadants in advocating a big hive, just about 50 per cent. larger than the 8-frame hive, and they say they don't have any swarming;

but then come the authorities and tell us that will do for extracted honey, but for comb honey it won't do at all, for the bees once started to storing in the brood-chamber will fight shy of the super all summer. How are we to know what to do, anyhow?

He starts a new theory that some may be inclined to question, when he says that the let-up in the honey-flow with the attendant decrease in egg-laying has a tendency to produce swarming. If he's right in that, it's worth while to try feeding through the dearth before clover.

Brace-Combs.—Even if Doolittle insists that brace-combs are needed under supers, I doubt if any one wants them under flat board covers, so it's refreshing to read that 15 years' experience given by H. E. Hill, page 307. I believe there is a growing feeling in favor of the thick and wide top-bar he commends, only I'm wondering whether it isn't better to have only ¼ inch between top-bars. He has 5/16 or 7/16. With 5/16 I get brace-combs. But I space 1⅜ from center to center, to 1½. Can wider spacing make the difference?

Issuing of Swarms.—That seems quite an unusual case mentioned by J. A. Golden, page 309, but I'm not sure whether I entirely understand it. Do you mean, Friend Golden, that the young queen hatched out and staid in the hive three days with the old queen, and the swarm issued with the old queen, leaving the young queen in the hive?

Italian Bee History.—I must give M. M. Baldridge credit for preserving some degree of brevity on page 311. The tendency in all such cases is to switch off onto a number of side-tracks, forgetting almost entirely the one point at issue in the first place. When that occurs, it would be a good plan for the editor to switch them back on the main track.

Marking Hive-Entrances.—Friend Faylor asks, page 313, "Who knows a way to mark the entrance so that the bees will find their own doorway?" I don't know that I can give a full answer, but I can help a little. Have a tree, post, or something of the kind directly in front of an entrance, and not more than six or eight inches from it, and I think that entrance will get all its own bees and none others. Let two entrances be not more than an inch apart, with a dividing board between them, projecting out six inches or so, and I think those two entrances will not be mixed in the heads of the bees.

Bees Sticking to the Combs.—In answer to the Riverton* man, page 315, I will say that as a rule, Italians stick to the combs whether three or five banded, but I think he has something new under the sun in those bees that hide in the grass like quails. I have seen some well marked bees, however, that were not as quiet on the combs as others, but that's exceptional. Marengo, Ill.

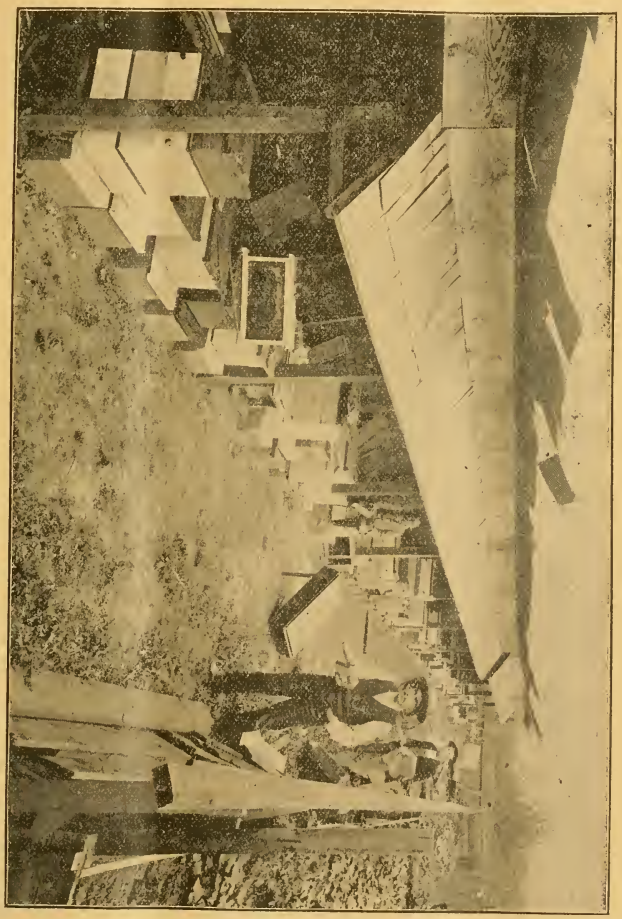
[*The "Riverton man" that Dr. Miller refers to in his last comment is a "man" all right, for his name is C. V. Mann. It seems our proof-reader wasn't "man" enough to notice the omission.—Editor.]

APIARY IN THE STATE OF WASHINGTON.

BY G. D. LITTOOY.

I send you a photograph of my apiary of 76 colonies, under a shed high enough so there is plenty of room to work with the bees and yet be in the shade. Also the shed is a very good protection in winter, especially in this climate where we have

plenty of rain from October until June, with a few inches of snow in January, which is gone in a few days, and as we leave the bees just as you see them, all the year round, it is better to have them protected. This shed is 150 feet long, and I find it



The Apiary of Mr. G. D. Littooy, Tacoma, Wash.

very handy, as there is room enough to have everything close at hand that is wanted from time to time while working among the bees.

It is also supposed that this climate is too cool for successful work with the solar wax-extractor. You see it is just a little behind me in the picture, and all my old

combs and bits of wax have been turned into very fine light wax by its use. The observatory hive you see is what I shall have as one of my exhibits at the Tacoma Exposition, and have in it one Hoffman frame with 5-banded bees, and a very fine yellow 5-banded queen.

Also you will notice two sticks just in front of the Otis hive, with queen-cells on. I have been rearing queens this summer on the Doolittle plan, with partial success, and got some very fine, large queens out of 50 cells, also some small ones, which I destroyed. I only succeeded in getting 15 queens, as the weather was too cool for rearing good queens until the latter part of July and August, and now the bees are not getting any honey, so I may have to wait until next season, or feed.

You will see I am using the closed-end frame hive, or Heddon hive. I saw so much in the BEE JOURNAL and *Gleanings* in reference to the sectional hive, that I thought to experiment with it this season, and see which I should adopt, as I had no authority to refer to for assistance in this most important implement in bee-culture. Hence my article in the AMERICAN BEE JOURNAL of June 7th. I believe the editor asked for information on that from Mr. R. L. Taylor, but as yet I have seen no reply that would assist a beginner. Now my experience is this, that the sectional (or Heddon) hive is very handy. I rub tallow on the edges of the frames before putting them in the hive, and I can take out any frame just as easily as the Hoffman frame, that is, when I wish to do so, which has not been often, as I simply reverse the case, turn the screws, and let down the frames ¼ inch, and turn the screws tight, and that is all for the season. For my use I like them better than the regular 8-frame hives, but this is only my first season with them, and next winter will tell on them, how they are for a winter hive.

Last winter, in the dovetail hive, I lost 10 colonies out of 55, and they had plenty of stores left, so I could not account for the loss. The stands under the hives are 8 inches high, which makes the hives about 9 inches above the ground. I think for this climate it is best to have the hives high enough up so as to keep them as dry as possible in winter. I aim to keep all weeds and grass away from the front of the hives.

We are busy making a hot-house where a hot-bed formerly stood, and now have it full of cucumbers, which you can tell by their leaves.

You see me in the picture as I work most of the time with the bees, except I pull down the veil and either tuck it under my vest collar, or let it hang down loosely. I also use the Bingham smoker, which is very handy when needed. Often smoker nor veil is used by me; but when blacks or hybrids are worked with, smoke and veil are needed.

My brother stands back of me with a "Globe" veil in his hand, and also another younger brother sits on a hive, so now you have three of us this time—I may send you more some other time. Tacoma, Wash., Aug. 26.

BEE-PARALYSIS—ANOTHER NEW DISEASE.

Supposed Causes and Cures.

BY C. W. DAYTON.

I notice your mention of sulphur for "bee-paralysis." Sulphur was no cure in my hands, and I tried it in every conceivable way and extent; also salt. A change of the queen has cured in every instance of some 30 colonies—last season and this. Some diseased colonies which went through the winter showed it again last spring. It appears to be caused by imperfect queens, which become imperfect through extensive egg-laying.

I have seen the disease in Iowa, but it was slightly different from the California kind. Here it usually attacks a colony about the time it gets populous enough for the surplus receptacles. Then the colony gradually weakens until the surplus receptacles will not be occupied, and they are taken off as empty as when put on. Even in an abundant honey-flow they are unable to get much ahead, and often are unable to gather their daily food. It begins gradually, so that by keeping a few newly-reared queens they may be introduced as soon as the first symptoms appear, and avoid very great loss.

I do not discredit the statements of those who have recommended salt and sulphur, but I write this for those who having tried those remedies with failure may try the supersedure. Caging the queen for awhile, or in any way restricting her egg-laying, seems to be influential. Colonies which lose bees rapidly in summer, lose none in winter. This was the same in Iowa.

Another disease, if disease it proves to be, has appeared, which has enough semblance of foul brood that considerable parts of apiaries have been destroyed by burning. But the affected brood is apparently like common dead brood. This I have not had enough experience with to be certain of the cause, but I will advance a theory that the larvæ die a death of starvation from not being sufficiently supplied by the nurses. This might happen from there being a lack of food because of the near approach of the nurse-bees to starvation, or too few nurses for the amount of brood to receive care. Then again, I believe the nurses might be a little too lazy to be sure their work was thoroughly done. It has been said that to bring bees to a warm country where there was honey all the time, they lose their industrious habits. While this is false in the main, it is slightly true. There may be two different localities not over 10 to 15 miles apart. In one, the colonies must have enough stores left in their hives to last until the next season's honey harvest. In the other locality they can gather enough from the flowers nearly every day in the year, and that without regard to how dry the year. In many localities, with only 3 inches of rain last December, 10 to 15 colonies could find enough flowers to obtain their support all the year round. Of course when 100 to 200 are gathered into one place they would then require a store in the hives, because the flowers would not be numerous enough.

In the first-mentioned locality, on the approach of starvation, the young brood is allowed to die, and then afterward the capped brood is devoured by the working-bees. Then the bees begin to drop off, and finally the queen and her retinue; these last dying some days after the last morsel of honey disappears. No matter what the weather may be, they are dependent upon the store in their hives.

In the other locality a colony can gather honey every day the sun shines. In Southern California there are almost solid months of sunshiny days, but this is very much more so in some localities than others, although the respective localities may not be far apart. For example: Willows have been constantly in bloom here since last November, and there is now a variety just putting forth its blossoms. Every day when the sun shines the bees can fly out and return with loads of honey and pollen. But in this willow locality there is less sunshine. While the sun shines clear all day long in the mountains, here there is fog until ten o'clock in the morning. Then it clears up for three or four hours. Then come clouds. This is the every day procedure. But occasionally there come several days of clouds all day, or there may be cold or wind which would keep the bees in the hives. This leads to starvation of a somewhat different kind. These spells are liable to happen during the winter and early spring. This constant supply of a little honey and much pollen makes brood-rearing boom even in January.

I had my first swarm Feb. 2nd; the latest, about two hours ago, with a good

supply distributed between those times. The more honey they have, or are able to get from the flowers, the faster they rear brood. If there was 60 to 100 pounds of honey in the hive, they would use it all up in three or four months, unless there was a constant and heavy supply from the outside. This season the outside supply has been constant but light. This made brood-rearing of a still more extensive kind. To carry a large stock of brood through several days of unfavorable weather, would require several pounds of honey. In this way a few days may starve the brood, but not the bees. I presume the queen's work goes steadily on, and the bees eat the eggs laid. When the queen is starved so as to stop depositing eggs, it takes considerable time to recover, but in the starving of the brood only, as soon as the clouds pass away, the brood-rearing bounces forward again with increased activity. For a batch of brood to be starved and destroyed it divests the colony of the requisite number of nurse-bees there should be a little later on.

Eucalyptus, willows, mustard, oranges, and alfalfa represent so many honey-flows, each of which in common seasons might yield from 20 to 75 pounds to the colony of surplus, but this year there was scarcely one-fourth of a crop of bloom. The very best colonies got ahead not over three to five pounds of honey, and then came a slight dearth between. During the dearth the bees could live, but they could not maintain the large stock of brood. Last week a colony might have eight combs of brood, and this week little or none. We could see no future honey harvest to warrant feeding such large amounts of brood, and if they were fed, it simply resulted in more worthless brood. It would have been advantageous to restrict brood-rearing, but this would involve a great deal of labor and expense in a system of contraction.

As the colonies since early in January have been overflowing with bees, where swarms issued and were hived they nearly always had to be fed while the stock of brood in the old hive was so dependent upon the daily gather of the bees which went with the swarm that that required feeding also. The natural result of about half of the swarms was to build a little comb, and after a few days abscond, and then go traveling about the country, roosting on a bush or fence at night. I have had such migratory swarms stay around the apiary for a whole week, taking wing every day and alighting in a different place. Sometimes they would disappear from the apiary for a day and then come back again. The bees seemed to leave the cluster and go for loads of honey, about the same as if they were located in a hive. If honey became very scarce, some of the bees starved, and dropped from the cluster. If honey was abundant, they constructed a few combs, and were it not for the sun melting such combs, there would be hundreds of colonies dwelling in the branches of trees in open air.

Of the localities here, there are the mountains where there is one main honey-flow during the year; the valley proper, where honey-yielding flowers abound all the year round, and the medium or hill country. In the mountains this year it is positive starvation except by constant feeding; but in the valley the bees may be able to obtain a living. In the hill country, this year, bees are as liable to starve as n the mountains. In good years the hill country has not the abundant supply of flora, of either valley or mountains, so that those bees would be on the verge of starvation then.

All last fall and up to about Jan. 15th I had about 40 colonies which had 40 to 60 pounds of honey as winter stores. Then there were some 40 others which had their honey all extracted last November except 5 to 10 pounds. Neither of these two lots have been helped, or had any more honey taken away, and to-day they are in about equal condition as to bees, honey, brood and swarming, and only one has died of starvation. Brood-rearing in the light ones was gauged by the outside

honey-flow, while the heavy hives kept up a heavy supply of brood all the time. Of course the colonies where brood-rearing was restricted are worth the most now, because their queens have preserved their fertility. This new disease appeared in the scantily supplied colonies early in February, at about the time of the first starving of brood, but not in the well-fed colonies until they had exhausted their supplies and became dependent upon daily forage about the first of April. In 10 to 12 colonies which had previously had the disease, when abundantly fed, the disease disappeared entirely. Of the affected brood the cells have (usually) the pin-holes in the caps as in foul brood, and the caps are flattened or concave, and apparently darker. The flattening is probably caused by scarcity of wax to cap, and when the bees discover the occupant to be dead, they discontinue the work, which results in leaving a hole in the cap. After the larva dies it turns black, and this gives a dark appearance to the thin cap of the cell. By feeding the colonies well, the cells return to the usual healthy color by the supply of more and newer wax for sealing, and the plump convex shape.

In 1889, in Iowa, I noticed dead brood in many colonies, which was located near the center of the brood-nest, where the supply of wax would naturally be exhausted soonest. At the time I had secured a quantity of unfinished section honey from fruit-bloom, but our clover harvest was a total failure. To secure the completion of one-half of the sections, I fed back the honey from the other half. Instead of capping the sections when level full, they persisted in lengthening the cells out through the slots in the separators and sections. So I thought to put the filled sections over unfed colonies, and they would immediately seal them, which they did, but in place of new wax they used propolis. From this I concluded that they sealed the brood with propolis and smothered it.

In Iowa, or, for that matter, any Eastern State, in the spring, about the time the winter stores are exhausted, and about the time, or a little before, clover comes into bloom, apiarists begin to feel a little nervous because of danger of starvation and destruction of the brood upon which depends the results of the harvest a few weeks later. This season usually lasts not more than a week, or sometimes only two or three days. Here this same condition has existed for a continuous four months, or since the first of March. About the first of February it began to dawn upon us that there was to come a dry year. For experiment four colonies having their hives heavy with honey had their queens caged. Occasionally the queens were given their liberty one or two days, and then recaged. This caused the colonies to grow weaker and weaker until about a week ago, when the queens were released to renew the force of working-bees. At present there are three to four patches of brood in each hive, about the size of a man's hand, while the rest of the hive is entirely filled with honey as last fall. The scant supply for brood-rearing in other colonies, in the case of these broodless ones, has constantly augmented the old store, and there is more in any one of these four hives than in any fifty others.

Our prospects for a winter supply are no brighter for the future than they have been all the spring and summer, for there is no more certainty of a honey-yield from the dead and parched mountains or fields, than from a field of clover which has been mowed and stowed in the mow. We may have abundant honey-yields from flowers that customarily yield but little, but it is easy to know what flowers are going to bloom. Some flowers yield honey in dry years—alfalfa, for example—but sage I believe never does. Basswood yields dry years, but clover is soon parched brown. The only yield which cannot be foretold is that of honey-dew. But even that is not excepted in many localities in California, because of the lack of leaves or grain-stubble upon which it forms.

A few bees, a prolific queen, and a hive full of honey, promise something far in the future; but bees, brood and queens, with no honey, are a weak affair.

Florence, Calif., July 7.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Have Some Nice Honey.

No spring dwindling here this year. It has been too dry for a heavy honey crop, but we have some very nice honey for the people here. A village of 1,000 people, and those living near, want lots of honey.

The 4 days at the World's Fair last year, and the one hour among the honey exhibits, are sometimes in my mind's eye yet, and from what I learned I have been paid back many times.

O. E. CLARK.

Brillion, Wis., Sept. 10.

Plenty of Honey for Winter Stores.

Bees did fairly well here for a short time, but we had two weeks of dry, hot weather the first of August that checked the honey-flow, but since then we have had rain, and the weather is cooler, and the bees are working lively again. I harvested over 400 pounds of comb honey from 12 colonies this year. I got but one swarm.

I think the bees will have plenty of honey to winter on, and there will be a fair crop of corn in this (Polk) county, or at least a part of it.

J. A. SCOTTEN.

Bolivar, Mo., Aug. 28.

Introducing and Absconding.

On page 204 Dr. Miller says he introduces queens after the bees have sealed queen-cells. I have just lost two queens by not tearing down queen-cells. I released the queens on the fifth day, and they were accepted, as they had laid in three or four frames, but when the young queens were hatched they attacked the laying queens and killed them.

In "Lessons in Bee-Keeping," Mrs. Atchley says bee-keepers may be mistaken when they say bees go off to the woods from the parent hive without clustering. I *know* I am not mistaken, as I lost one of my most valuable queens in that way this summer. This was their first attempt to swarm, and with all that I could do I could not induce them to settle, for there were plenty of fruit and shade trees near to cluster upon; and another queer part to me was, just as I was returning from pursuing them, a swarm was issuing from another hive, and without clustering entered the parent hive of the absconding swarm, and all was happy (except myself).

LAWSON HEGLER.

McLean, Ohio, Sept. 3.

Bee-Keeping in Australia.

Bee-keeping in Australia is making very rapid strides, the industry being largely developed in New South Wales through the department of Puplic Instruction sending a paid lecturer into the country districts, giving information to induce settlers to better their position by keeping bees, and assisting those already started. The past season has been a failure in the coastal districts, but excellent in the Western plains, most apiaries in the plains averaging 200 pounds and over per colony. I happen to be in the unfortunate part, and only averaged about 60 pounds, though bee-keepers within 16 miles of my bees did not get a single pound, and had to feed their bees for winter.

W. S. PENDER.

W. Maitland, N. S. W., Aug. 3.

Unwired Frames—Building Comb.

In a late issue of your excellent paper (page 240) Dr. Miller attempts to point a moral—and hits the unwired frame a hard slap.

Let me suggest to those who have not yet tried it, to tier up by placing the empty body at the bottom instead of on the top, as is usually done. It is a sure and excellent way to have every comb securely attached to the bottom-bar. By this method you may safely dispense with wired frames.

One word of caution, however: If the colony has not yet swarmed, you must use full sheets of foundation, otherwise you will get all drone-comb. If it is this season's swarm, you may safely give them starters—I use a strip about an inch deep. My experience is that bees will build combs much more

quickly during a honey-flow if the room is below the brood.

The brood-combs, after the bees are hatched out, make excellent extracting combs, and will be securely attached all around—except two little passage holes at the bottom corners. Try it.

Bees promise to do well in the Palouse valley. They have swarmed some, and all have stored more than enough to winter on. JOHN A. BALMER.

Pullman, Wash., Aug. 31.

Wintering—Rolling in the Honey.

After reading W. P. Faylor's letter, on page 313, I concluded to let the craft know how I winter my bees, which is similar to his plan. I build a shed 5 feet deep, and 5 feet high at the front, or high side, open to the south, and 3 feet on the north side, closed tight. I place the hives in a single row, about one foot apart, and fill in between the hives with forest leaves packed down as solid as I can with my own weight (not very light), till the top is reached, then I cover the top with leaves and straw, leaving the entrance open on all fair days. In stormy weather I spread a gunny bag loosely over the front till the storm is over.

By the way, I must tell you that I had a great treat a few days ago. Bro. Frank Coverdale called on me. He is a live bee-man, sure enough, and well up in bee-lore.

Bees have been doing well since the drouth was broken, about three weeks ago. They are just rolling in loads of honey from an enormous crop of heart's-ease. Perhaps I will report when we round up. S. H. CLARK.

Elwood, Iowa, Sept. 8.

Poor Season for Bees, Etc.

It has been dry and hot here all summer. The dry weather last fall and the hard freezing that we had the latter part of last March finished up the white clover in these parts, which was our main source of a honey crop. So my bees had nothing but red clover to work on, and the season was so dry that it did not secrete much honey. About half of my bees will have enough to winter on, and the rest will have to be fed or they will starve. I did not get a single section of honey this season, and I don't know of a man around here that did. This was the poorest season that I remember seeing in my life, and I am in my 61st year. Of course the forepart of my life I would not remember much about, but in my young days there were many wild flowers here, but now there are but few.

I think we all will have to go east, where our bees can get pine rosin from which to build their combs, I will refer the reader to pages 77 and 78 of the BEE JOURNAL for July 20, 1893. That is about like queens reared in the fall and mated in the spring, and making good, prolific queens. I don't know what kind of beeswax the rosin would make, as I have never had a chance to try it, but I think that it would be a good thing. I don't believe that the moth would bother our bees if the comb was made of rosin, and I suppose the honey would be more healthy if it did not partake too much of the taste of the rosin. I don't know whether the foundation machines could make sheets from it or not. But I think it would do for those six-months-old virgin queens to lay in, that had not been previously mated! THOS. S. WALLACE.

Clayton, Ill., Sept. 3.

Two Honey-Plants.

I send samples of two honey-plants. Please name each, and tell us their value as honey-producers. The white flower grows on low bottom lands, and is just blooming. The other has been in bloom since early spring.

J. D. GIVENS.

Lisbon, Tex., Aug. 26.

[The white blossomed plant is boneset, sometimes called thoroughwort, which, as Prof. Cook says, "fills the marshes of our country, and the hives as well, with their nectar."

The other plant is *Dicliptera brachiata*. It seems there is no common name in the botany of Texas for this plant. Doubtless the bees get some honey from it.—EDITOR.]

The Lebanon, Ind., Fair, Etc.

Our Lebanon Fair was held Aug. 20th to 24th. Premiums for the exhibits of bees, honey, etc., were awarded as follows:

Best queen-bee, J. V. Emmert, $2.00. Best display queen-bees, J. V. Emmert, 1st, $2.00. Comb honey, 10 pounds in most marketable shape, J. R. Reynolds, 1st, $4.00. Extracted honey, 10 pounds, J. W. Henderson, 1st, $2.00;

J. R. Reynolds, 2nd. Display of honey, J. W. Henderson, 1st; J. V. Emmert, 2nd. Comb foundation for comb honey, J. W. Henderson, 1st, $2.00; J. R. Reynolds, 2nd. Comb foundation for brood-nest, J. W. Henderson, 1st, $2.00. Display of beeswax, J. V. Emmert, 1st, $1.00. Display of supplies, J. V. Emmert, 1st, Diploma. Collection of honey-plants, Fred Gibbons, 1st, $3.00. The judge was H. L. Harlan.

I had a fair yield of honey this year, my crop averaging about 45 pounds of comb honey to the colony. I have also extracted 20 gallons from two colonies.

Lebanon, Ind. J. V. EMMERT.

Got a Partial Honey Crop.

The clover was an entire failure in Missouri this year. Linden (basswood) did well, but the bees were weak, and a partial crop was the result.

THOS. A. ANDERSON.

Montgomery City, Mo., Aug. 27.

Heavy Rains in Utah.

Salt Lake City is under water. We are never troubled with floods very much, but we had a small one at noon to-day. For about 30 minutes rain and hail came down in torrents—more than I ever saw fall in the same space of time. Some of the streets were under water for a time, and bridges floated, but it soon passed off, and it has made all nature look as fresh as a daisy. The many rains that we have had here this summer have been of great benefit to the country, making things grow all over, whether irrigated or not.

We have a fine country here, but like all other places, some of our land is worthless, but our best land grows everything in abundance. E. S. LOVESY.

Salt Lake City, Utah, Aug. 31.

Bees Did Finely—Honey-Dew.

Bees have done finely for me this season. We have had one continual flow since early spring, removing all sections betimes when completed, and returning such needing completion. I now have a few hundred soon to remove. I would like to ask if it would be wrong to offer for sale sections if finished up with honey-dew? I do not think the bees need them, as their brood-nests are well filled. I have surmised of late that they were busy in the morning on poplar trees. Is there any way to detect honey-dew from fall honey, such as buckwheat and goldenrod? I am inexperienced in this line. Is honey-dew nasty and unwholesome? I have frequently seen it mentioned in the BEE JOURNAL.

Our honey-producing plants here are apple-bloom, raspberry, white clover, milkweed, basswood, cucumber, melon-bloom, corn tassle, buckwheat, goldenrod, and many other plants.

F. W. CARRIER.

Bennington, Vt., Sept. 4.

[Will some one who has had much experience with honey-dew, please answer Mr. Carrier's questions in the BEE JOURNAL?—EDITOR.]

Fine Prospects for Fall Crop.

Bees are still doing well in this locality. Goldenrod is beginning to bloom, and we are having a few swarms. In my experience I have never before known bees to swarm here in September. The prospects for a fall crop of honey are fine. H. F. COLEMAN.

Sneedville, Tenn., Sept. 3.

Working on Fall Flowers.

We have now 110 colonies of bees, and at present they are doing well on fall flowers. We expect about 3,000 pounds of honey. Our apiary is situated on the bluffs, near the Mississippi bottom, about a mile south of Quincy. We think that bees near to river or creek bottoms will get enough for winter, but we fear the others must be fed if they live till next spring. HAYCK BROS.

Quincy, Ill., Sept. 5.

Honey and Other Texas Crops.

I have 25 colonies of pure Italians and hybrid bees, and I am very fond of them, not only for pleasure but also for profit. I have taken about 40 pounds of fine honey per colony, but will have another good flow this fall. I use the Bingham Perfect Conquerer smoker, and for fuel I use old, half-rotten chips from my wood-yard, and the smoker will burn about one hour before it needs refilling.

Farm crops are good here this year. Corn will yield from 30 to 40 bushels per acre, oats from 50 to 75 bushels, and cotton from ½ to ¾ of a bale to the acre. ERNST WUTHRICK.

Pflugersville, Tex., Sept. 1.

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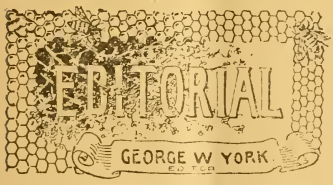


September Days, so bright and fair—
We welcome them with glee;
For sweet-faced Asters smile and nod,
And dear, delightful Golden-Rod—
They cheer us now—both you and me.

Then let us to our duties go,
With hearts all light and gay;
For flowers sweet around us bloom,
To drive away the doubt and gloom—
And thus make bright our way.

Membership Cards for the annual members of the North American Bee-Keepers' Association have been issued by Secretary Benton. They are of very heavy cardboard, and neatly printed in the form of a receipt, having the names of President Abbott and Vice-President Hershiser in type, and blanks left for the pen signatures of the Secretary and Treasurer.

By sending the Dues ($1.00) for 1894, to the Treasurer, at this office, we will immediately mail you a Membership Card all properly filled out. Then at the meeting next month, we believe you are to receive a badge free, upon showing your Card to the Secretary. By securing the Card receipts before the meeting, it will save the Secretary much work at that time.

The Full-Page Engraving on page 403 explains itself. It certainly makes a "full page"—no mistake about that. It shows what imitation of the habits of the industrious bees will accomplish. It's a pretty big "hive," but differs in some respects from the hive in which bees live. It has the same busy industry, but instead of collecting and storing up, all the time, this Root "hive of industry" is continuously making within it, and sending out to the world, every conceivable requirement of the well-equipped apiary. It is widely known as "The Home of the Honey-Bees."

Mr. P. S. Eustis is the genial Gen'l Passenger and Ticket Agent of the CHICAGO, BURLINGTON & QUINCY RAILROAD, with headquarters in the elegant general office building of the company located in Chicago. You know the "Burlington Route" is the *best* to take when going to St. Joseph, Mo., to attend the North American convention, Oct. 10th, 11th and 12th. Please don't forget this, if you want to ride on "a railroad as is a railroad!"

Kinks in Bee-Keeping.—On page 402, Bro. F. L. Thompson gives a good article on the subject of "kinks" in bee-keeping. We are glad he has written as he has, for it is just what is needed. What bee-keepers need to-day is to know more of the time and labor saving kinks used by others, and the only way in which such kinks will ever be learned by those who don't know them, must be by describing them for the bee-papers.

We are always glad to publish any useful knowedge about bees or their successful management, no matter who may write it

—whether it be written with a golden pen or with a lead-pencil. We just believe that half of the BEE JOURNAL list of readers know lots of good things that the other half never thought of, and what we want is, to have those who know these valuable kinks to give them to the bee-keeping public through the BEE JOURNAL.

In a great measure, the BEE JOURNAL will be only what its subscribers and contributors make it. No editor—be he as wise in bee-lore as a Solomon of old—can possibly get out an interesting and satisfactory bee-paper *all alone*. Besides, who'd want to read such a one-sided affair, anyway? If the writer knew as much about bee-keeping as a Doolittle, a Miller, or a Dadant, he wouldn't nauseate his readers with his own ideas to the exclusion of others equally *entitled* to know at least a *few* things about bees!

Let's have your ideas—*the good ones*—the more the better! Send them along. Describe them as clearly as you can, and thus *give* as well as *receive*.

Jas. Forncrook, of Watertown, Wis., stopped at the office of the BEE JOURNAL for a few minutes on Tuesday, Sept. 18th, being in Chicago on a business trip. He is the manufacturer of the "Boss" one-piece sections, besides other supplies used by bee-keepers. He is one of the largest makers of bee-fixtures in the Northwest.

More Reduced Rates.—The Central Traffic Association will also grant the same reduced rates (1⅓ fare for the round-trip) to the St. Joseph, Mo., convention on Oct. 10th, 11th and 12th. This includes roads east as far as Buffalo. Next week we will be able to give a list of the roads included in the Central Traffic Association. In the meantime, begin to arrange your business affairs so you can go.

Bro. R. Miller, of Compton, Ills., gave the BEE JOURNAL office a pleasant call last week. He had been over in Michigan looking up the farming possibilities, with a view to locating permanently if suitable. His honey crop was small this year, but from sweet clover he obtained the lightest-colored honey he ever saw from that source. He is a great believer in sweet clover as a honey-plant. And his faith seems to be well founded.

Moving Rightly.—Pres. Abbott, of the North American, received a letter from Mr. E. K. Terry, of Burlingame, Kans., saying that his article on page 202, "is a move in the right direction." He wrote further that they have a bee-association in its third year, of which he has the honor of being the President, and that they expect to send a delegate to the St. Joseph convention. That's good! Let every bee-association in the land imitate this Kansas example. We would suggest that, so far as possible, the presidents of the local associations be selected for the honorable position of delegate to the North American. But don't expect him to be a "*walking* delegate"—but purchase his railroad ticket for him, and send him on the (rail)way rejoicing.

Queens to Australia.—One of the largest shipments of queens that ever left for Australia at one time was sent by Mrs. Atchley on Sept. 14th. There were nearly 100 queens in the shipment. Some of the queens were sent by mail, and some by express. One lot of 20 was shipped by express to San Francisco, with instructions to the express agent there to mail them on the steamer leaving Sept. 20th. The cages being already stamped and addressed, the agent would have nothing to do but hand them to the mail clerk.

The lot of 20 by express to San Francisco is an experiment, as 50 per cent. of those sent to Australia this year and last died, and Mrs. Atchley believed that most of them perished in the mails before they reached San Francisco, as the plains to be crossed between Beeville, Tex., and San Francisco are fearfully hot.

No doubt all will be glad to learn how many of the nearly 100 queens reached their Australian destination alive, and in good condition. Later on we hope to be able to report perfect success in the matter.

Too Good to Keep.—Yes, that's what Pres. Abbott says of the contents of a letter he received from Bro. L. D. Stilson, editor of the *Nebraska Bee-Keeper*, which he mentions as follows:

DEAR BRO. YORK:—I am just in receipt of a letter from Friend Stilson, in which he says:

"In regard to our Nebraska bee-keepers coming to the meeting of the North American, I will say that present arrangements

are to leave Lincoln on the morning of Oct. 10th, making a daylight run, reaching St. Joseph about 4 p.m. We will have a special car over the Missouri Pacific, retaining the same for a reception either the evening of the 10th, or sometime on the 11th. Our mark is for an attendance of 40 or more."

Good for Nebraska! Those people up there never do anything by halves. All right, Friend Stilson, we will see that you get plenty of time for that reception—but the evening of the 10th is to be taken up with a general reception.

Who will be the next to report? Can we not have just such a crowd from Missouri, Kansas, Iowa—yes, and several other States? Let us make this the largest "swarm of bee-keepers" that was ever seen on this or any other continent, in spite of a short honey crop in many localities. We have not had a word from Texas yet. How is it, Sister Sherman? Can you not put some of that big crop of honey in a trip to St. Joseph—the "Queen of the West?"

Nebraska bee-keepers should take notice, and join the train referred to by Mr. Stilson, at the nearest point. Reduced rates. Write to L. D. Stilson, at York, Nebr., for particulars. Fraternally yours,

EMERSON T. ABBOTT.

We don't see what we can add to the above inspiring announcement by Bros. Abbott and Stilson. It's just splendid! Certainly, other States will duplicate that arrangement. We'd be glad to announce something like 40 more "special cars" of bee-keepers that will be off for St. Joseph next month. Let's make this Quarter-Centennial Meeting the grandest of all!

But, say, Bro. Stilson, don't you dare "show up" at St. Joe without that big-hearted old "war-horse"—E. Whitcomb—and his bigger-hearted wife! D'ye hear?

Another Lady Bee-Keeper.—We learn that on Aug. 23rd, a young lady bee-keeper came to the home of Mr. and Mrs. S. F. Trego, at Swedona, Ill. She weighed 8 pounds. Her father, in notifying a friend about the event, said: "If you hear a noise up this way, do not get scared, as it is only Miss Florence Trego making herself known."

Mr. T. writes us that his good wife's life hung in the balance for several weeks, which, of course, required his entire time and attention, so much so that his queen-business suffered greatly during that time. He will arrange everything satisfactorily to all. So now he's ready to be congratulated upon his new title—"papa."

Reduced Rates, (1⅙ for the round trip) in addition to the "Harvest Excursion" rates have been secured on many of the roads running to St. Joseph, Mo., for the North American convention on Oct. 10th, 11th and 12th. The following from Secretary Benton explains the matter more fully:

REDUCED RAILWAY FARES TO ATTEND THE NORTH AMERICAN AT ST. JOSEPH, MO., OCT. 10TH, 11TH AND 12TH.

The Western Passenger Association, under the conditions named below, will grant reduced railway fare to those who travel over their roads and attend the meeting of the North American Bee-Keepers' Association at St. Joseph, Mo., Oct. 10th, 11th and 12th.

Conditions.—Full fare will be charged going. Return-tickets will be issued at *one-third the regular fare*, provided the purchaser presents a certificate from the agent of whom he obtained his ticket, and provided also at least 100 such certificates shall be presented. There can be little doubt on this last point, especially as special round-trip excursion tickets, even such as are issued to parties of 10, 25, or more, traveling in a body, will count toward the 100, provided each purchaser is careful to secure a certificate of purchase from the ticket agent who sells him the ticket, and to present this certificate at the convention to be countersigned by the Secretary of the Association.

Therefore *do not fail to secure a certificate when you purchase your ticket, whether single or round-trip, and no matter whether you intend to take advantage of the reduced fare or not.* It may aid others in obtaining the reduction.

Time of Tickets.—Valid Oct. 6th to Oct. 15th; that is, they may be purchased three days (not counting Sunday) before the first day of the meeting, and the return-ticket may be obtained any time up to the night of Oct. 15th.

Railways.—The following are the roads included in this reduction: Burlington, Cedar Rapids & Northern; Chicago & Alton; Chicago & Northwestern; Chicago, Burlington & Northern; Chicago, Burlington & Quincy; Chicago Great Western; Chicago, Milwaukee & St. Paul; Chicago, Rock Island & Pacific; Chicago, St. Paul, Minn. & Omaha; Hannibal & St. Joseph; Kansas City, St. Joseph & Council Bluffs; St. Louis, Keokuk & Northwestern; Illinois Central; Iowa Central; Minneapolis & St. Louis; Missouri Pacific; Rock Island & Peoria; Sioux City & Pacific; Wabash; Wisconsin Central lines.

When necessary to pass over more than one line, and in case a through ticket with a certificate cannot be obtained, it will be necessary to obtain a certificate from each agent from whom a ticket is purchased, in order to entitle the holder to the reduction on return ticket.

Those who do not live within the territory

covered by these lines should, wherever practicable, purchase a local or a round-trip ticket to the nearest line named above, and secure there a ticket to St. Joseph, with certificate of purchase.

Further notice will be given in case other railway lines grant reduced rates.

Harvest Excursion.—Some may be able to take advantage of the "Harvest Excursion" rates (one-half fare plus $2.00) given Oct. 9th, full particulars of which can be obtained of your local agents.

Change of Date.—Note the change, as announced by President Abbott, in the date of the meeting from the middle of the month to Oct. 10th, 11th and 12th.

Place of Meeting.—The convention will meet in the rooms of the Commercial Club in St. Joseph, at the corner of 3rd and Edmond streets, three blocks from Francis Street Depot. Take electric cars at Union Depot and get off at 3rd street.

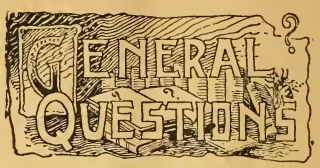
FRANK BENTON,
Sec'y. N. Am. Bee-Keepers' Association,
U. S. Dept. Agriculture,
Washington, D. C.

We might add to the foregoing that it is desired to have a showing of honey, especially extracted, from every part of the country at the convention, and it is requested that every one who attends should bring a bottle of extracted honey, with the kind of honey and the place where it was gathered marked upon a label to be fastened to the same.

Women Riding Bicycles.—Bro. A. I. Root was recently asked for "his opinion in regard to women riding wheels." Of course he sanctioned it, as his two daughters and a daughter-in-law all ride bicycles, and are the better for it. It is such a common thing here in Chicago to see women riding bicycles, that we think nothing of it at all. Why, that widely-known American queen—Miss Frances E. Willard—rides her bicycle daily, and is now reported to be writing a book on the subject of women bicyclists. Certainly, almost everybody would be the better to have a good wheel to run on the ground, rather than (as some would-be bright people say) have "a wheel in their head!"

☞ "The BEE JOURNAL is a welcome visitor with me, and I hope success will follow the undertakings of the publishers of our BEE JOURNAL."—Joseph Hentrich, of Wisconsin, Sept. 8, 1894.

Great Premium on page 415!



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Getting Rid of Moth-Worms.

How can I get rid of moth-worms? In looking through most of my light colonies I found that the moth-worms had been at work, and in some of the hives they had killed a great deal of brood. I lifted the hive from the bottom-board and cleaned it, and killed all the worms I could find. Is there any way that I can prevent their hatching in the hive? I am using the 8 and 10 frame dovetail hive. In some of the hives I killed as many as 20 worms, and they made a bad looking job of some of the combs. I tell you I am not very friendly to that kind of visitors, and the sooner they leave the better I shall feel. L. S.

Aurora, Ill.

ANSWER.—Italian bees and strong colonies are the best cure and preventive. A strong colony of black bees are not likely to be troubled with the pests. It is said that combs covered with bees are not troubled with them, and yet they are often found in the middle of the brood-nest. If there were no other advantage in Italian bees, I should have them for the sake of keeping out bee-moths. Even a nucleus will take care of a number of combs.

Kill all you like the way you've been doing, but put your principal trust in Italian blood.

Artificial Shade for Hives.

I would like to get advice in regard to making shade for my bees, for next year. I have 20 colonies, and have had them partly under oak trees the past summer. I find they need better shade than these trees, for the limbs are quite a distance

from the ground. The bees hang on the outside of the hive when they have plenty of room in the supers. I do not make this statement about the bees hanging out on hives knowing I need better shade on this account, for there may be other reasons why they hang out so much, but I want shade, and I think life is too short to wait for shade to grow in the way of grape-vines or trees.

I am thinking of making a roof about 12 feet wide and 20 feet long, and about 6 feet from the ground, using cedar posts to support the same, and boards one foot wide, painted, for a roof. I would use no battens for cracks, for some water would not hurt the hives, and it would let some of the hot air out of the shed. I think I could board up the north side of this shed for protection against north winds in winter, and take it down in the spring.

I am using a modification of the Heddon hive-stand having the front board on an angle, so the bees can walk up easily. Is this plan all right?

We have very hot, sultry days here. I find that the better they are shaded, the more honey they store—which was not much this year. About all of mine was dark, and almost unsalable.

Sutton, Mo. A. W. D.

ANSWER.—If you don't mind the expense, I think you'll like the plan you have outlined. Even with cracks two inches wide, you'll find it a great protection. Rough, cheap boards of any kind will do, so they are fastened to keep the wind from taking them off. At the same time it might not be a bad idea to plant grape-vines or woodbine, so that when your roof needs renewing the vines will do it. Vines on stakes close to the hive have been voted a nuisance, but I think I should like them on a trellis six feet overhead.

Bee-Paralysis, Most Likely.

I want to know what can be the trouble with my bees, and would be pleased to have a remedy suggested.

Since Sept. 4th I have noticed at the entrance of one hive, day by day, the bees have been clustered as is the case where robbers are trying to enter, and the same appearance was indicated by numbers of bees seen dragging out numerous small-sized bees.

Upon close examination the victims are seen to be black, shining specimens, evidently undersized, and apparently undeveloped in some way, for many of them seem to fly with difficulty. Those that can fly or crawl are curled or tucked up just like bees will do when stung by others. Only a few are dragged out of the hive alive, and when they are dragged out they seem to be nothing but a shell, being so light that the well bees can fly away with them easily.

About ½ pint are dragged out in a day and night. The entrance smells just like decaying bees. I enclose you a sample of the bees. R. T. S.

Fellowsville, W. Va.

ANSWER.—You seem to have a case of the much-talked-of and much-written-about bee-paralysis. I don't know any cure. Several have been given, and those who have given them seem very certain as to their efficacy, then directly some one comes along who says he has tried them and they have failed. I suspect that in the case of some of the cures, if not all, the disease disappeared of itself and the remedy had nothing whatever to do with its disappearance. My bees have had more or less of the disease for several years, but each year it has disappeared without my trying any cure. If I had changed queens, fed salt, powdered with sulphur, fed honey, or used any of the other cures, I might believe in them. But I did nothing, and never suffered any great loss. But as we go farther South the results of the disease become more serious, till it becomes a veritable scourge. You will find considerable about it in very late numbers of the AMERICAN BEE JOURNAL.

The "Miller" Bee-Feeder.

Do you keep for sale the feeder which I suppose bears your name—the Miller feeder? If you do not sell them, who does? Can the same feeder be used on a 10-frame and 8-frame hive, or must I get one for each size of hive? If I understand, they are large enough to feed 15 to 20 pounds of syrup at one feed. I would like to get a circular with the cut of the feeder. Is it much of a job to put them together if bought in the flat? What is the cost? L. S.

ANSWER.—I don't keep supplies of any kind. The Miller feeder is manufactured by A. I. Root, and for aught I know, by others. Price, nailed up, 25 cents each, or $2.20 for ten. In the flat, 16 cents each, or $1.40 for ten. They are made to fit an 8-frame hive, but can be used on a larger hive by putting a piece of board over the part of the hive that the feeder doesn't cover. It's no great trick to nail them together.

Transferring—Wintering Bees.

I have 13 colonies, having increased from 7, that I got through the last winter with. I have 5 dovetailed hives with 8 Hoffman frames, that I got this summer. I have 7 box-hives with 8 frames of my own make, of course being irregular and void of science or system. I took off 25 pounds of honey from each of the box-hives in July. I have ½ acre of buckwheat, and ½ acre of horse-mint growing along a spring branch, besides quite a good deal of golden-rod, catnip, etc., all in full bloom now. My bees are working almost as strong as they did in May and June.

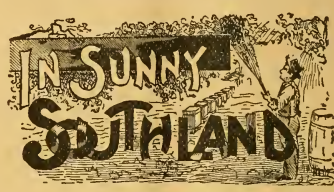
1. Is this a suitable time to transfer to the dovetailed hives? or should I wait until spring?

2. In preparing my bees for winter, I propose to make an outside case of ordinary 1-inch plank or boards, large enough to admit of 2 or 3 plies of tarred paper roofing, as a lining. I will put them on by having a small screw at each corner of each board—set them up each in its place, confine them by passing small annealed wire from one screw to the opposite one, around the corner; and so at each corner, drawing the wire sufficiently tight to bring the case to the hive. This may be made sufficiently warm, and proof against vermin or insects, and is quickly taken off or put on without disturbing the bees. What do you say to this? Will it do? If not, why not? W. H. H.

Parkersburg, Ind.

ANSWERS.—1. It's desirable to put as little extra labor as possible on the bees after this time of year, so you'd better postpone transferring till spring. You see they probably have everything in about the shape they want it for winter, and if you go to tinkering with them they may not get it in as good shape before winter catches them. You would not gain much anyway by transferring this fall, unless the comfort of feeling that you had them in hives that will suit better, but it is doubtful if it will suit them as well—that is, if you change them now.

2. Very likely it will work all right. If it keeps them dry and warm, with full chance to fly when the weather is favorable, it ought to work. And yet what succeeds in one winter doesn't always do so well another. You can only tell by trying it several winters in comparison with other methods. Some think that in a mild winter, when bees have frequent chances for flight, it's better not to have much in the way of letting the heat of the sun get to the bees, and you must remember that any kind of packing that helps to keep the heat of the bees in will also help to keep the heat of the sun out. But in a severe winter, when the heat of the sun doesn't count for much on a hive, then thick protection counts.



CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Sending Queens Long Distances.

MRS. ATCHLEY:—In conversation with bee-keepers at our late convention, the following ideas respecting importing queens cropped up:

As the bees die, they choke up the feeding places, so there should be at least three or four of such accessible from the one center.

Another: Send only a very few bees with the queens. They are less liable to panic and fretting.

It is presumption for me to think to tell you what you don't know, but as these ideas were spoken of by men like Mr. H. L. Jones, of Goodna, Queensland, and Mr. Mansfield, I thought perhaps it may be some guide to you.

Our late convention will, I feel satisfied, lead to good results. I trust things are prospering with you in your Southern home. E. TIPPER,

Editor Australian Bee Bulletin.

West Maitland, Australia, July 24.

Friend Tipper, I am very much obliged to you for the information you give regarding queen-cages. It is by the exchange of ideas that we gain knowledge, and I am glad to know that you have some bee-keepers who are experimenting on shipping queens long distances. I will be very glad indeed when we arrive at plans or ways of putting up queens so that they will go safely, as it pains me to learn of the

death of good queens when the purchasers are so anxiously awaiting their arrival. Then what a disappointment to find them dead!

I would so much enjoy meeting your bee-keepers in convention. Your convention reports are very interesting and instructive to us over here. I like to read your Australian bee-talks; and, by the way, your *Bee Bulletin* is an excellent journal, and you are deserving of patronage and success. I trust that Australian bee-keepers will sustain your efforts. JENNIE ATCHLEY.

To Beginners in Bee-Keeping.

Dr. Miller's talk on answering questions by letter strikes me very forcibly, and I cannot help offering a few more words in addition to what the Doctor has said. First, I will allow you to read one of *hundreds* of just such letters, then you can better understand my explanation:

HOUSTON, Tex., Aug. 6, 1894.

MRS. JENNIE ATCHLEY:—I saw a communication from you some weeks since, in the Houston *Post*, concerning bee-culture, so I thought perhaps you would be kind enough to answer a few inquiries that I would like to make about the business, and also about Beeville.

I am a widow with five children, have a little money, and would like to go into some business that a woman could attend to herself, and still be at home with her little children. I know nothing whatever about bees, but after reading your letter, it occurred to me that probably I might buy just a few acres of ground, have one or two cows, and so almost raise my living, then make something with the bees, as I should not suppose it would take all one's time to attend to them.

Please excuse me for troubling you with my private affairs, but I thought if I explained the whole situation, you would be better able to advise me whether you thought any one with no experience whatever, could venture to undertake the business, with any hope of success.

If you would kindly write me about what it would cost to get started, and about what a small place would cost, etc., I would be very thankful to you indeed. Is there any opening in Beeville that you know of that a lady could take hold of, except the bees—any business, I mean? I have a great notion that a person could get on better in a small place where everything is not already filled. Are there good educational advantages there, so my children would not suffer?

Hoping that I have not asked too great a favor, and that you will answer at your earliest convenience, I am,

Very truly yours,

MRS. B. B. R.

Now, it seems that such letters *must* have a personal reply. Well, that is only the beginning of trouble, as the answer just opens up a place for questions four times in number, and to cut off such correspondence is next to an impossibility, unless one just drops it, and that won't do, for if we wish to promote apiculture, we *must* answer questions.

Now, after writing the good lady above mentioned, and explaining things in as short a manner as I knew how, telling her if she would subscribe for the AMERICAN BEE JOURNAL I would there answer all her questions, and she would gain knowledge faster, and be less burden on me, then came a second letter, asking if she had better get a colony or two of bees, and correspond with me a year or two and get some experience, *then* take the BEE JOURNAL. Of course I always advise a beginner to get from two to four colonies of bees (not more), and then take a bee-paper, etc.

Now, after considerable correspondence I wish to give the last letter received, and you will at once almost catch the middle correspondence:

HOUSTON, Tex., Sept. 4, 1894.

MRS. ATCHLEY:—This is the first opportunity I have had to answer your kind letter, owing to serious illness in my family. Your letter gave me a good deal of encouragement. I am very fond of an out-door life, have always been, and would neglect my household duties any time in order to work in my flower garden.

I think I possess the qualities you speak of, viz.: energy and determination, and am certainly not afraid of work. I had about made up my mind that I had made a mistake in regard to the bee-business not taking my whole time—just as you said anything will, properly attended to.

One thing troubles me. I am not at all nervous or timid, still, would it be safe, do you think, for a woman to live alone with five small children, out in the country, or is it pretty well settled up around Beeville? Would it be wise to undertake as many as 30 to 50 colonies right at first? I thought probably

it would be best to start out with a few, until I understood the care of bees better. I shall act on your suggestion, and come there to look around for myself—that is always the most satisfactory way.

I thank both yourself and your husband for you kind offer, and will be glad indeed to have your help and advice. Were it possible, I should come right away, but circumstances will not permit. My mother-in-law is a helpless invalid—has not walked in 25 years—her limbs are drawn and twisted with rheumatism, and in these late years she has been a great sufferer from kidney and other trouble. Out of eight children she has only one daughter, one son and myself left. She leans and depends so much on me, that I have not the heart to leave her, although I think it would be to my advantage to do so. I fear she will not be with us many months (possibly weeks) longer, hence my desire to have some plan in view for mine and my children's future.

Are there public schools in your place? That would be an item of importance to me, having so many children to educate.

Again thanking you for your interest and trouble, and hoping to hear from you again, if not asking too much, I am,

Yours very truly,
MRS. B. B. R.

P. S.—Would you advise me to subscribe for the paper you so kindly sent? I thought it would be a good idea to be reading up on the subject, then I thought perhaps it would be better to learn by experience, as I find I always do better that way. Please advise me. Your letter served to give me strength and courage, for it seems to me what one woman has done, another can do, if she will only persevere, and not be discouraged by the difficulties that must arise. MRS. B. B. R.

Now, dear friends, I do not wish you to understand that I am not willing to answer letters by mail, etc., but I would be *proud* if I were so circumstanced in life that I could devote at least a part of my time to helping those that I could help. But I have yet to work hard for my living, and my time is not my own—it belongs to my family and my business, and it is a great burden on my strength to answer all these letters.

Why, you see my report got into the common press of the country, last year, and reached England, France, Germany, etc., (and I am sorry to say it was somewhat magnified before it got across the ocean), and the letters that have teemed in to me for ten months past, would surprise any one; and *all* from people ignorant of bees. I do not care to have my report published any more.

Well, now, to the point: I am paid to write for the AMERICAN BEE JOURNAL, and to answer questions through its columns is "copy" for me, and good reading for all beginners, and good matter for the JOURNAL, as this is one branch of the BEE JOURNAL to answer questions, and be of as much help to its readers as possible, and if a bee-keeper, not now a subscriber to the BEE JOURNAL, will send me his or her subscription, and ask questions, I will take pleasure in answering in full, and give all the information I can. When you *must* have a reply by letter, please excuse me if it is cut short, and do not accuse me of selfishness, for I trust you may believe me when I tell you I have not the *time* to answer you by letter.

In conclusion, I will say that this is my advice to all beginners: Get some bees, subscribe for the BEE JOURNAL, ask questions, and soon learn to be a bee-keeper. JENNIE ATCHLEY.

Beeville, Bee Co., Tex.

Best Season in Ten Years.

MRS. ATCHLEY:—This is the best season I have had in the ten years I have kept bees. My 27 colonies, spring count, have increased to 49, and I have taken 900 pounds of comb honey, and 2,700 pounds of extracted, and still honey is coming in from buckwheat.

C. J. BALDRIDGE.

Kendaia, N. Y., Aug. 30.

Profitable Bee-Keeping, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

Chief Sources of Surplus Honey, Etc.

Query 942.—1. What is your chief source of surplus honey?

2. What plant, if any, will it pay for you to cultivate for honey alone?—Indiana.

1. Linden. 2. None.—EUGENE SECOR.

1. White clover. 2. None.—M. MAHIN.

1. Basswood. 2. None.—P. H. ELWOOD.

1. White clover. 2. None.—J. A. GREEN.

1. Basswood. 2. Not any.—G. M. DOOLITTLE.

1. Clover and linden. 2. None.—J. H. LARRABEE.

1. Heart's-ease. 2. Alfalfa.—MRS. J. N. HEATER.

1. White clover. 2. White clover.—MRS. L. HARRISON.

1. White clover. 2. I don't know of any.—C. C. MILLER.

1. White clover. 2. Sweet clover, if any.—JAS. A. STONE.

1. White clover and basswood. 2. None.—R. L. TAYLOR.

1 and 2. *Liriodendron tulipifera* (poplar).—J. P. H. BROWN.

1. White sage and wild buckwheat. 2. Not any.—A. J. COOK.

1. Clover, basswood and heart's-ease. 2. None.—C. H. DIBBERN.

1. White clover and basswood. 2. I believe sweet clover, but I have not tried it.—E. FRANCE.

1. White clover, Alsike clover next, then basswood. 3. None that I know anything about.—H. D. CUTTING.

1. Clover, knot-weed (also called smart-weed) and Spanish-needle. 2. Melilot (sweet clover).—DADANT & SON.

1. Our chief sources are catclaw, horsemint and mesquite. 2. I think it will pay in this country to cultivate horsemint for honey alone.—MRS. JENNIE ATCHLEY.

1. Fruit-blossoms in the spring; white clover in the summer, and golden-rod in the fall. 2. I don't believe it will pay to cultivate any single plant from which to obtain a yield of nectar.—J. E. POND.

1. White clover and basswood. 2. None. Alsike clover will produce fine honey, and make good pasture and hay, so what is the use of cultivating a plant that is good for honey only?—EMERSON T. ABBOTT.

1. Basswood. 2. Nothing that I know of where land is good enough for farming. Perhaps on poor and stony land it might pay to sow sweet clover, and on very sandy land to sow mint.—S. I. FREEBORN.

1. My chief source for surplus honey is white clover, though black locust gives the "send off." 2. I know of no plant that will pay the cost of cultivation, in honey alone. The cultivation of plants for honey alone is entirely impracticable, and it requires but little reflection to see it.—G. W. DEMAREE.

1. White clover, linden and Spanish-needle. 2. I know of no plant worthy of cultivation alone for its honey, but Alsike clover can be substituted as a fertilizer, hay and pasturage on our farms, with beneficial effect to our honey crops. Sweet clover is a splendid by-way pasturage.—J. M. HAMBAUGH.

1 and 2. See reply to Query 940. The "Rocky Mountain honey-plant" is a marvel in its way, and alfalfa, white clover, basswood, buckwheat and the like, are of great value. I am glad to see some interest manifested in this direction. Take note of the honey-plants of your locality, the time of bloom, etc.—W. M. BARNUM.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 416 for advertising offer.

Have You Read page 415 yet?

HONEY OUTLOOK IN THE SOUTH, ETC.

BY DR. J. P. H. BROWN.

This year has been a very discouraging one for the bee-keepers in most of the Southern States. The honey crop has been nearly a total failure, excepting in Florida where the product has been the heaviest and finest they have had in years.

While all this is very discouraging to the bee-keeper, it is not any worse than the failures that frequently occur in the production of many other crops. Because adverse seasons destroy and cut short the cotton, corn, fruits, and horticultural products, the farmer does not abandon the culture of these crops, but he "picks flint and tries again," and endeavors to bring to bear, in his renewed efforts at their culture, all the skill and knowledge he can command. Hundreds of colonies have already perished, and hundreds more will "go up" unless fed before April comes again. In many localities bees can gather enough winter stores from the fall flowers, particularly from the asters. The golden-rods in my locality yield comparatively little honey, and we have acres of ground covered with them, while the asters yield abundantly until frost.

By the first of October all colonies should be examined, and if any have less than 20 or 25 pounds of stores, they shonld be fed until they have about this amount. It is always best to place the feed, at evening, within the hive, and to give as much as they can take up.

As the patched-up tariff bill of the political solons has caused an advance in the price of sugar, the honey-producers must see that they get more for their honey.

RENDERING COMBS INTO WAX.

All comb that is not intended to be saved for future use should be rendered into wax. For small quantities the sun-extractor is the best contrivance for doing it, but where the quantity is large, a large iron pot, water and a bag properly worked are the best for the business. The wax comes out bright and yellow, and superior to that rendered by most of the wax extractors.

The combs that are intended to be saved, should be well fumigated with sulphur, for, unless this is done, the worms will soon destroy them. In our climate broods of the wax-moth continue to develop until frost.

SPREADING COMBS TO PROMOTE BREEDING.

When Mrs. Ellen Tupper was in her apicultural zenith, there was started a spreading-comb craze that was carried to such an extent that many colonies were injured thereby. Theory and practice do not always tally. Theory is more often based upon the imagination than upon solid facts. The idea advanced by Mrs. T. and others was, that after the queen started to laying in the spring and established

her brood-nest, it should be spread by placing unoccupied combs in the center, and the amount of spreading should be governed by the laying capacity of the queen. In carrying this idea out an experienced bee-keeper would seldom make a mistake, but the novice very often made mistakes by spreading the brood too much—away beyond the covering capacity of the attending bees. Result—chilled and unprotected brood that died—resources of the colony wasted, and its strength diminished instead of increased. If spreading is practiced at all, it should be done with a caution—one comb inserted at a time, or not more than the colony can care for, should there be a stress of bad weather.

If a colony is kept in good condition with nice worker-comb in the center of the brood-nest, and plenty of stores, there is no use for any such tinkering. The bees know quite as much about their ability to take care of brood as their keeper—in fact more, because they always regulate the amount by their capacity to provide for for it, whereas he often has more young than he can properly rear.

Augusta, Ga., Sept. 14.

FACTS ABOUT SWEET CLOVER.

BY M. M. BALDRIDGE.

On page 341, a reader of the BEE JOURNAL says that he desires to know when to sow sweet clover seed, how much per acre, and what effect cold weather has upon it.

If for honey alone, sow not more than five pounds of seed per acre. This will give the plants plenty of room to stool, but none too much. If for hay or pasture, sow from 10 to 15 pounds per acre, so the stems will make a finer growth. Early in the fall or spring is perhaps the *best* time to sow the seed. Sow alone or with grain. I should prefer to cover the seed by harrowing lightly. I have planted the seed in my garden, as an experiment, the same as I would vegetable seeds, and have had the plants in sight in four days! I planted some the first of this month, and they are to-day (Sept. 15th) two inches in hight.

I have been quite well acquainted with sweet clover since 1858, and have no remembrance of a winter that has ever done it any injury. It will stand the coldest weather that we have in the Northern States, when the plants have become thoroughly established. When very young the plants are rather feeble, and at that stage of growth will not stand severe freezing weather, nor perhaps a long-protracted drouth. Last spring one of my correspondents sowed 80 acres to sweet clover upon an uncultivated tract of land. The clover germinated and grew fairly well, but before the plants had secured a proper growth that cold freeze the last of March came on and destroyed them. This correspondent keeps no bees, but he grows sweet clover for a double purpose and extensively, namely—for hay and pasture, and to enrich the soil. There is perhaps no plant that will improve the soil so rapidly as sweet clover. The plant being a biennial, the roots die and rot at the end of the second year. The roots being large, and several feet in length, fill the ground with an enormous amount of rich vegetable matter, and this can be depended upon, on the same land if so desired, every two years.

There is, in my opinion, no one plant now known that will produce more and better honey per acre than sweet clover; and, as it is at last coming to the front as a fertilizer for worn-out soils, and as a hay and pasture plant for many kinds of stock, it will in the near future be grown more extensively than the majority of bee-keepers at present imagine.

St. Charles, Ill.

SUGGESTIONS ABOUT APIARIAN "KINKS."

BY F. L. THOMPSON.

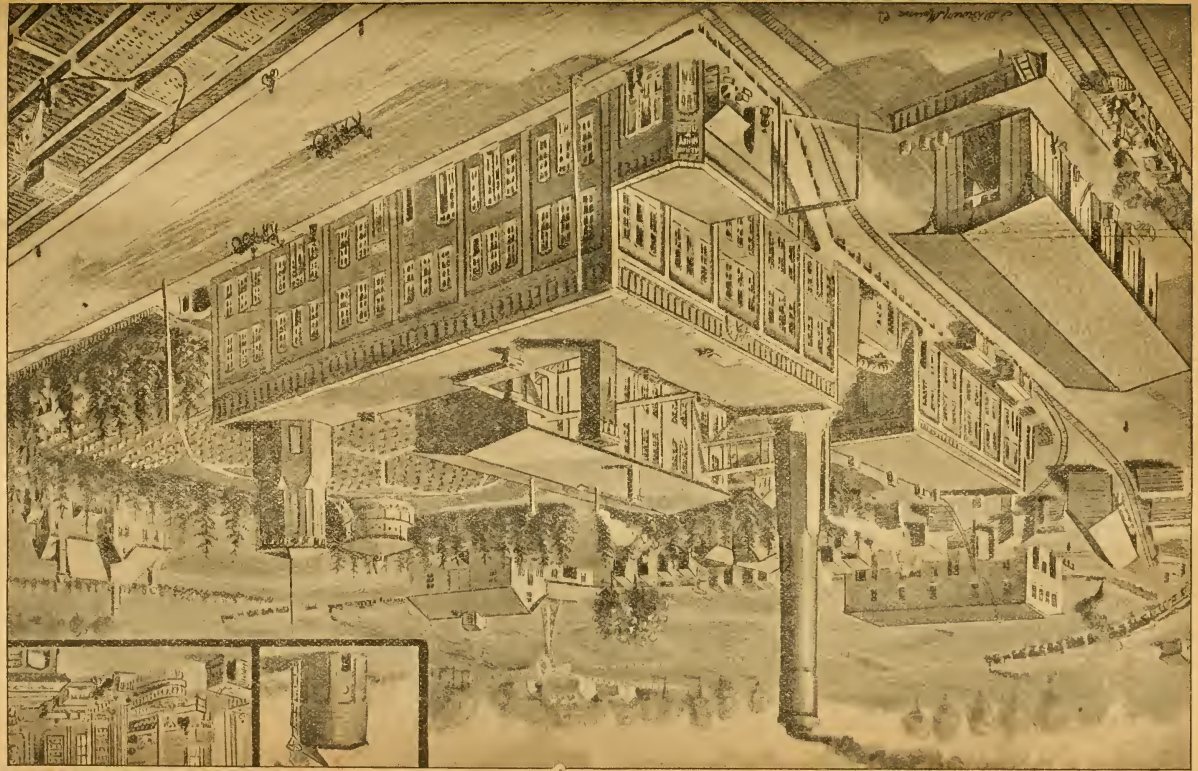
The editor makes a good point on page 103, when he asks, "Have you discovered any new kinks that are worth knowing?" Our bee-papers are already about as good as they can be editorially, but there is plenty of room for improvement on the part of contributors. We all know the man who successfully runs large apiaries and attends all conventions, at which he is continually letting fall words of wisdom in the shape of kinks—though even there he does it principally in conversation before and after—but the bee-papers never hear from him.

It has been said that the periodicals have gradually taken to themselves all functions of conventions except the face to face meeting. It ought to be so; but it is not entirely so yet, by any means. Mr. Hasty says it is because most bee-keepers don't know how to write. I don't believe it. It is because they have not the right attitude of mind toward writing of this kind. If by association of ideas a man unites in his mind the *Century*, *The Nation*, or *Harper's Monthly* with the AMERICAN BEE JOURNAL, and does not write for the latter because he could not for the former, that does not prevent him from writing business letters which are plain and to the point.

The AMERICAN BEE JOURNAL needs no more style from its contributors than a collection of business letters would. Besides, we are working toward a plain and simple style even in purely literary performances; unless we except certain erratic schools of poetry, which do not concern sensible people. Indeed, one characteristic of modern style is the absence of style. The matter is looked to more sharply than the manner. Practical men like bee-keepers have nothing to fear on that score. The Senate Chamber no longer resounds with stately imitations of Burke and Webster. It would be considered bad taste. W. D. Howells, the greatest living American novelist, takes particular pains to erase all passages from his works which sound too literary.

But, after all, it does not matter so much in what shape the kinks come, as that we get them all right. If a kink is spread over a page, which might be put in a paragraph, let us be thankful it is no worse. We want kinks. If we don't help one another to them, we shall not get them. The bee-books contain a few, but only a few; revisions occur too seldom, and there is not room enough for them all, anyhow. I cannot agree with Mr. Heddon in thinking it best to compress *everything* into the smallest possible compass. That is all right as a department of bee-literature; but it would be a serious blow to progress if it was the whole of it. Plenty of kinks are the life and soul of bee-culture. By their aid we comprehend the essential principles much more fully than we otherwise could. We need such periodicals as the *Review;* but no less do we need the AMERICAN BEE JOURNAL and *Gleanings*. Concentrated food alone, weakens the digestive powers.

But, it may be said, it is the business of editors to prod up the successful men, as they know "who rides this hobby and who that," in Mr. Hutchinson's words. That may be; and in the essential principles of bee-keeping this plan leaves nothing to be desired; but in the department of kinks, to judge by results, they do not reach one one-hundreth of the men we ought to hear from, nor is it to be expected. To get kinks, we must look to the number, as well as the reputation, of bee-keepers. One would think, for instance, that R. L. Taylor would be an experiment station in himself; but one of the first things he did on being appointed was to ask for suggestions—not from a select few, whose names were known—but from *everybody* who is a practical bee-keeper. Let us not forget, in our zeal at condensing, boiling down, getting the "cream"—that the "General Public" is an old veteran at bee-



keeping. The old gentleman is occasionally behind the times, but he knows a thing or two.

Besides kinks and short cuts, there is another department depending largely upon the general contributor for support. You know how provoking the bee-books are sometimes. You look up something, and apparently find out all about it; then work according to directions, and fail; and after finding out the right way by experience, you look it up again, and find that it did tell you of that point, but in such a way that you failed to appreciate its connection with the rest. Or, that point may have been omitted entirely in the book. You can't expect everything of a book. If all details were given so as to preclude any possibility of a mistake in any department, the result would be a regular encyclopedia, and would defeat its own object—people would care neither to buy nor to read such a book. But an article describing the process, in a back number of the BEE JOURNAL, would likely be much more detailed and satisfactory than the description in the book; the writer, writing from fresh experience, and not bothered with the desire to be brief, would probably be so impressed with that particular point, that there would be no mistake about what he meant. There is considerable value in articles which treat of nothing new, but only tell how some man successfully did something.

Who will write such articles? Not the "veterans," altogether; they are too much occupied with the "unsolved problems" of apiculture; it must be largely the rank and file, providing, of course, they have a certain amount of experience. They should be given in few words if possible; but better too many than none at all.

Finally, let contributors remember that they are casting bread upon the waters; every contribution which is a fruit of their experience adds not only to knowledge, but also to the desire of imparting knowledge, and they will reap the fruits of it in learning more of the experience of others. The "let us hear from all the brethren" idea, being an essential principle of human nature, must be represented *somewhere*. It will not "overboard into the deep, deep sea" yet awhile, though a dozen Mr. Hastys flourish their scissors at it. Arvada Colo.

[See page 391 for editorial comments on the above "kinky" article.—EDITOR.]

THAT BEE-ESCAPE HONEY-BOARD.

BY W. C. LYMAN.

I should like to say in reply to Dr. Miller's question on page 275—"Why not merely leave a hole for drones to get out without any escape, in that plan of W. C. Lyman's?"—because the idea is to have all the bees get to work as a part of the working force of the colony as soon as possible, and not to have any division of interest caused by a second entrance to any part of the hive.

Young queens could return through a hole as well as drones, and thus set up a little kingdom, or queendom, of their own in the upper brood-chamber, which would be a bad state of things if that brood-chamber is to be removed, or exchanged for the lower one, as will be seen farther on.

I first used a cone escape, but it was not satisfactory, for the bees returned through it.

In this plan I want the hive to return to its normal condition of brood-chamber with supers as soon as possible.

In using this plan of preventing increase, I hive the swarms on frames having very narrow starters of foundation, the foundation projecting below the comb guide of the frames about one row of cells. I use a wood-zinc honey-board between the

brood-chamber and supers, and full sheets of foundation in the sections. Thus the bees have full chance to build their own brood-comb—which answers the purpose of contraction very well—and they are not very likely to swarm again until they get them nearly completed. At this time, or later as desired, the places of the brood-chambers can be changed, putting the old one below, and the queen in it, and the new one containing the newly-built combs above the bee-escape honey-board, where the brood will soon hatch out, and the combs be ready to be removed and sorted.

The bees will thus be ready to winter on the same combs which they had in the first place, and little honey will be stored, except what goes into the boxes.

While the bee-escape honey-board is on the hive the escape acts as an excellent ventilator, and the bees are not so likely to swarm out by reason of the heat.

Downer's Grove, Ill.

MIGRATORY BEE-KEEPING QUESTIONS.

BY CHAS. F. JAESSING.

Migratory bee-keeping, as discussed and advised by Mr. John McArthur in the BEE JOURNAL of Sept. 6th, is a subject which has interested me very much ever since I have made bee-keeping my exclusive business, and Mr. McArthur's is the best article on the subject I have ever read.

I have been thinking that sending South every spring for as many packages of bees of one or two pounds (and a queen with each package) as I wanted colonies for that year, laid down about 45 days before the honey harvest began, so that I could get them good and strong for section honey, would be profitable, and would also relieve me of the work and risk of wintering bees. But I think that Mr. McArthur's scheme of getting full colonies of bees just before the honey harvest, is far better than mine.

I would be very much obliged to Mr. McArthur if he would write the details of his undertaking of 1893 for the BEE JOURNAL, and also answer the following questions, for I am sure that many subscribers of the BEE JOURNAL are as much interested in this subject as I am:

1st. Will it be necessary for one to go personally and purchase the bees, and then accompany them all the way to their destination?

2nd. Did you purchase the hives as well as the bees, or did you ship them in light shipping-boxes, and then transfer them at home into hives of your own?

3rd. Please describe your method of preparing and shipping the bees, number of colonies that can be put into a car, and cost of shipping a carload that distance.

4th. Lastly, will Mr. McArthur, or any Southern reader of the BEE JOURNAL, please answer whether plenty of bees on good combs and Simplicity frames can be purchased in latitude of Tennessee or thereabouts? Also the range of prices in May.

I ask these questions, hoping to hear from others who have tried the scheme, as well as from Mr. McArthur, and whether they have been as successful as has Mr. M.

If the AMERICAN BEE JOURNAL, with the help of its many practical writers, both in the North and South, can solve this problem, it will have accomplished very much for the cause of apiculture. Maumee, O., Sept. 10.

[As Mr. Jaessing says, this is an interesting subject, and likely worth investigation. Will Mr. McArthur and others who can do so, please comply with the request to answer the questions propounded in the foregoing article? We shall be glad to publish anything reliable on both sides of the matter referred to.—EDITOR.]

BEE-KEEPING AND CROPS IN UTAH.

BY E. S. LOVESY.

FRIEND YORK:—The "Old Reliable" comes regularly and on time every week, and while we always find in its pages many good things, we often cull, from a single number, points of information of more value than its subscription price for a whole year. While we get many other papers, we receive none that we relish with a keener interest than the AMERICAN BEE JOURNAL. No matter how far advanced, or how scientific our bee-keepers may become, there are none that will not be benefited by scanning its pages.

The honey-flow here, so far as we can learn, is above the average. While we have not heard from all points, we have heard from many places, and nearly all send good reports, and some say that the honey crop this year is unusually heavy—in fact, for crops of every description Utah is unusually blessed this year.

I have just returned from a trip through the northern counties to Bear River, north of the Lake. Now while we have pretty good crops nearly every year in most places, I do not think that I ever saw anything to quite equal this year. Fruits of every description—the trees and vines are groaning and breaking under their heavy loads; and the grain crops are also good. In potatoes and roots I don't like to state how much is often grown on an acre, because in this instance the truth would sound stranger than fiction.

I was surprised to see what is being accomplished in the Bear River country. It is not long since the coyote made his home there, and even now when we look on that portion of the soil that is still in its native or unbroken state, we are loth to believe that it will grow such immense crops, but I saw corn standing 8 feet high, and lucerne, the third crop, now ready to cut, averaging seven or more tons to the acre for the three crops; cabbage as large as a water bucket, and I saw over 30 potatoes dug from one hill, and other crops in proportion. I noticed a growth of fruit trees, vines, and shade trees, this season, of from 5 to 7 feet.

It seems to be an excellent country for bees. We visited one bee-keeper that had 63 colonies; he robbed 35 of them the second time two days before I called on him, taking out 2,300 pounds. This honey was gathered entirely from lucerne and the Rocky Mountain honey-plant. Shall we tell our friends the secret of all this? It is water—life-giving water. Water is on top in Utah. It is first and foremost. Next is our invigorating climate. We have no hot nights, no malaria, no cyclones, but it is claimed that Utah has a greater variety of minerals than any other State, and as she will soon be coming into the Union, we flatter ourselves that she will soon be one of the brightest stars in this great Nation. Please pardon this bit of enthusiasm for our own bright little gem that will soon be a shining star.

I visited several bee-keepers in this Bear River section, and they all reported that the bees were doing well. I am very much tempted to try and start a bee-ranch up there. The reason this land was not settled many years sooner, was the immense cost of getting the water on the land. There is plenty of water now which they can turn out of the river. The dams, tunnel, 70 miles of the two main canals 30 feet wide in the bottom, and 200 miles of laterals have been built at a cost of $2,250,000. They have about 9,000 acres under cultivation, and there is about 180,000 acres under the canals.

I met people there seeking homes from Iowa, Illinois, Wisconsin, Minnesota, Nebraska, Kansas, the Dakotas, and other places. They expressed themselves as being well pleased with this country—the land seems to be adapted to the sugar beet. The sugar industry here has proven to be a grand success. Our climate

seems to be changing to some extent. We had more rain here in May, June and July this year than there was in those three months in ten whole years during the early settlement of the country. We have no fear of getting too much rain in Utah —it increases the honey-flow, and insures good crops.

I saw a gentleman from one of the upper counties, and he said that the bees were booming, and that the grain crops were never better. He said that in two valleys to the southeast of Salt Lake City, the entire wheat crop would average over 50 bushels to the acre, and that barley and oats would go much more. I have been nearly all over Salt Lake county, and to many other places, and while nearly all say that the honey crop is good, some complain. While location may be the cause, it is generally bad management, the bees getting neither room nor care. Some never go near them except when they want to rob them.

In and near Salt Lake City the season has been good. First we had the fruit-bloom, then the honey-locust, and the bees have been working on the lucerne since about June 1st. Now we also have the sweet clover and the Rocky Mountain honey-plant, and the bees are still gathering honey from those plants. For about three weeks I had several colonies that gathered 50 pounds and over, each week, and three brought in nearly 100 pounds in a week. They are strong colonies; in the afternoon a person could not count them as they rushed into the hive.

Salt Lake City, Utah, Aug. 31.

Our Doctor's Hints.

By F. L. PEIRO, M. D.

McVicker's Building, Chicago, Ill.

Lookout for Typhoid and Malaria.

"About now look out for rain," the old almanacs used to advise us. And quite aptly we suggest that about now see that your cellars are thoroughly cleaned and fumigated, by burning some sulphur over hot coals. This kills all the bugs, worms, and other creeping things, and leaves your cellar nice and sweet. Then make one good, long resolution, and stick to it—never to put therein cabbages, potatoes, turnips or other vegetables that are likely to rot and set up sickness enough in your one family to supply a whole village! Why, I have seen malaria and typhoid fever attack every member of a large family, lasting, from first to last, from early fall to early spring, and leaving some of its victims with a broken constitution for months longer, to say nothing of the suffering and money spent for doctor's bills—all traceable to decaying vegetation in the cellar! Far better build a root-house or other receptacle for your garden stuff, than run such great risks of suffering, and perhaps death!

Your water supply is another of the great blessings you should be especially considerate of. It is amazing how reckless some people are regarding the location of their wells and cisterns. Only a few weeks ago the writer visited a family in a village in this State, and in their kindness for my comfort, they furnished me with water from their cistern, becase it was softer to wash with. Why, that water simply was awful! Whew, what a horrible smell—and "wigglers" by the thousands! Such water is simply abominable, and to think of having it under your very nose the year round, is certainly courting the most violent form of miasmatic fevers! No wonder the man was sick, and the wife little better, and baby's life threatened! My advice was to immediately fill up that putrid cavity, or move away from it. No use to pay for the doctor's advice and medicines, and live right over a pest-hole like that!

See to it that your well or cistern is far from your barn or out-house, that the water supply may not be contaminated by the barn-yard, pig-sties, or other sources of contagion. And see to it right *now!* You have more time now, and it can be looked after better this and next month, before freezing cold weather sets in. Don't neglect it. Mothers, see that this important matter is carefully looked after. When sickness comes, it is upon *you* that the burden of your suffering family comes. If you insist in time, you may save yourself great trials. "A word to the wise is sufficient."

Hints for the Husband and Wife.

DEAR MRS. GREEN:—Your suggestion is certainly admirable, and a reply to it so important that I yield to your request by stating the facts as delicately as consistent with a proper appreciation of the subject. Yes, I am not unmindful of the silent suffering of many wives from the unreasonable exactions of—I was about to say—beastial husbands! But what the remedy? Ignorance of physical results to both man and wife is largely responsible for this legalized kind of brutality, and diet is the next most important factor.

If men would only be taught to curb their passions, what peace would follow! How much more amiable they would be, and how sweet the disposition of wife and children. Where now discord reigns, mutual joys might be supreme!

Aside from a manly determination to subdue a perverted appetite to reasonable bounds, the importance of proper hygienic living is next in line of consideration. But, there, again, you touch a man in a tender spot—his stomach! The idea of limiting *meat* to once per week (or better still, not at all), would at first astound him with a sense of oppression little short of madness. But such is the practical fact. And why not? Do not others in the world work much harder, and live a more hardy, happier life who never even *think* of meat?

Meat is no more *essential* than intoxicants. Both are excitants in various degrees, and because of this fact both tend to lower human sensibilities. A diet of fresh vegetables and fruits tends in the very opposite direction—they more effectually nourish the system and exalt the mind to a higher plain of living. Meat stimulates, and thus develops latent disturbances of mind and body within us. Fruits and vegetables cool the blood, and give the body and mind greater vigor of thought and action. Oh, if these simple rules of living were steadfastly adhered to, how much brighter this world would be, and how little business for the divorce courts!

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of last number of the BEE JOURNAL for description and prices.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees Booming Yet.

I had 25 colonies on May 1, 1894, and I have 53 now. I secured 395 pounds of comb honey and 4,000 pounds of extracted. Bees are booming yet.

HENRY STARK.

Pulciver, Wis., Sept. 10.

Booming on Alfalfa.

Our bees have done excellent work this season, and the way they are bringing in the alfalfa clover honey to-day (Sept. 13th) would make glad the heart of any apiarist. Our alfalfa bloom will last about three weeks yet, during which time our bees will advance their season's record wonderfully. F. M. WEILAND.

Fowler, Colo., Sept. 13.

Had Pleasant Calls.

I cannot keep it a secret any longer. I have had a very pleasant call from Ernest Root and "Blue Eyes." This place is quite a summer resort, and Miss Root was here for a few days, getting the lake breeze, with her aunt, Mrs. Gardner, whose family was here from Manistee. Ernest's was, it seemed to me, a flying visit. We wanted him at least one whole day.

But we shall not forget their short and very pleasant call, and hope the next one will be a longer one. Now, Bro. York, it's your turn.

WALTER HARMER.

Onekama, Mich. Sept. 11.

[Thank you, Bro. Harmer, for your very kind invitation. But the BEE JOURNAL requires our attention so constantly that it is next to an impossibility to go anywhere. We want to go to St. Joseph, Mo., next month, however. Some day

we hope to have our business so arranged that we can call on our bee-keeping friends in various parts of the country. But until then we will have to be content with knowing the most of them through their pleasant letters.—EDITOR.]

Had a Splendid Honey Season.

This has been a splendid season with me. I have secured 3,000 pounds of comb honey. I have had considerable experience with the bicycle as a means of traveling to and from my apiary, which is located about 4 miles from home. I have boarded at home and taken care of my bees without any trouble whatever. I am now engaged in preparing my honey for market.

G. F. TUBBS.

Turtle Point, Pa. Sept. 14.

In Good Condition for Winter.

My crop of honey is small this year, with few swarms, but all colonies are in good condition for winter.

L. C. PIERCE.

Otsego, Mich., Sept. 12.

Bees Did Fairly Well.

It has been very dry here—no rain from June 15th until Sept. 7th. My bees have done fairly well, several colonies having gathered 56 pounds each.

H. W. BROWN.

Scottville, Mich., Sept. 13.

Bee-Keeping in Louisiana.

I am in the north part of Bossier parish, Louisiana, I have only 50 colonies of bees, situated on the hills, and the Red river runs within 100 yards of it. For 28 miles north it is swamps and natural growth of willow, and west it is about 4 miles to the hills.

The spring flow of honey is from willow and maple, and sumac, which is very fine in flavor and a bright color. The summer yield of honey is from the abundance of wild flowers which grow in the swamps, and some clover. A good portion is from the large farm fields of cotton and corn. We don't have any fall flow, only enough for winter.

Up to July 1st I took 2,700 pounds of extracted honey from about 30 colonies. From July to October they will be in big luck to fill up for winter.

Louisiana bee-keepers hardly need to think of their bees during winter—the hives are left on the stands from one year to the next. We manage to leave them enough stores for winter, and hardly ever have any to freeze. Sometimes a weak colony freezes up.

The only drawback is, that I lose so many swarms, and I know they are properly cared for, but I think they want to swim in the honey of the swamps. I hope some bee-keeper will give his idea about the cause of the swarms leaving. T. J. LUSK.

Plain Dealing, La., Sept. 12.

Working on Golden-Rod and Asters.

So long as I can sell a dollar's worth of honey I shall take the AMERICAN BEE JOURNAL. I have had very poor luck with my bees this season. I lost 31 colonies last spring, and have not had a new swarm this season, and but very little honey. But I never have seen bees work busier in all my life than they do now on golden-rod and asters.

J. W. MILLER.

Rodney, Mich., Sept. 14.

A Fair Honey Crop, Etc.

My 20 colonies of bees came through the last winter all alive, but two colonies were queenless and one was very weak. The other bees got away with one of the queenless colonies the next day after they were put out of the cellar. I sent for an Italian queen for the other, but it was late before they got started, yet she saved the colony, and they have stored one super of 28 sections full of honey. The weak colony has stored no surplus nor cast a swarm, but are in good shape now for winter.

Fruit-bloom was good for building up on, but white clover was a failure. Basswood was splendid while it lasted. I have taken from 19 colonies, spring count, over 500 pounds of basswood honey, and there is considerable to take off yet. After the basswood flow they scarcely made a living until about two weeks ago, when they commenced gathering from buckwheat and golden-rod, and although it is terribly dry they are now storing some honey in the sections. I think I will have at least 500 pounds to take off yet. Have increased to 34 colonies.

In the "Old Reliable," page 309,

among Friend Golden's valuable items he says: "We cannot see why the AMERICAN BEE JOURNAL should not find a place in every bee-keeper's home (who is able to take it) with its valuable information," etc. I say, where is there a bee-keeper in this broad land, even if he keeps but two or three colonies, who is able *not* to take it? I am but a novice in bee-keeping, having bought my bees to start with two years ago last July, but I would not do without the AMERICAN BEE JOURNAL, even if its price should be raised to $1.50, as suggested by Mr. Hutchinson on page 297. In fact, the departments of either Dr. C. C. Miller or Mrs. Jennie Atchley are worth more to me than the subscription if it were raised to $2.00 per year. SCOTT LAMONT.

Jarrett, Minn., Sept. 6.

An Effective Little Sermon.

Last February I started with the AMERICAN BEE JOURNAL, and since that it's about all I read, and can hardly wait from one week to the other for it. After reading the editorial on page 295, referring to Dr. Miller's comments on page 311 of the same BEE JOURNAL, my next move was to read what the Doctor calls a little sermon, and its a good one for me. I thank him very much for taking such an interest in the secretaries, and I hope that more secretaries besides myself gained by the sermon. Hereafter I will try to do a little more condensing, and then I hope to hear from the Doctor again. J. C. KNOLL.

Glenwood Park, Nebr.

Wet Weather and Ants.

We live in the borders of the Brazos, or "Cross-timbers," and near enough to the Gulf of Mexico to hear the breakers. I think you will be interested to know that we have had a very poor honey season here, because of the *unusually wet weather*. Our "dried out" friends would have been more than welcome to two-thirds of our rain the past summer. Here the driest seasons are the best for honey.

Though this is my first year with bees here, yet it is long enough to learn what a pest ants are. There were thousands of them in the honey-house. If a frame containing eggs was set down for a few moments, the eggs were all removed. If young bees fell to the floor, they were immediately attacked and killed in a very short time, and a drop of honey would be covered with ants.

I discovered that many of the nests were in loose earth raised on top of the ground. I took a pail of water and an old ax, and made a mud-and-ant pie wherever a nest could be found. I assure you the mixing was not slighted. That was over two months ago, and I have not been bothered since.

Before ridding them out, I found it necessary to place some hives on a platform, letting the hives rest on four blocks, about 1-inch cubes, and the blocks surrounded with pyrethrum or insect powder. I have since heard of a bee-keeper who pours coal-oil in the nests to drive them off. When ants entered a hive under the cover, I found that a light dusting of pyrethrum on the edge of the hive would keep them away.

T. J. ADAMS.

Velasco, Tex., Sept. 8.

Sulphur Cure for Paralysis, Etc.

I have noticed a good many inquiries in the bee-papers about the sulphur cure for bee-paralysis, and therefore I will give my experience with it.

Last summer I had a colony affected with this disease, whose queen came from the North. The queen was a good layer and seemed to be all right, but as soon as they would gain in strength they would begin to die off, until there were not more than enough to supply and take care of the brood-nest. It aggravated me very much to look on these Italian bees, I expected more of them, and didn't get anything, while I had 30 colonies of black bees in healthy condition that were storing in the supers right along. I tried the salt cure several times with no effect. I also moved them into a new hive with frames of foundation, but it did not help any, either. I was so disgusted that I had a good notion to burn them, and I would, too, if it had not been for an item in the AMERICAN BEE JOURNAL, telling about the sulphur cure. I went to work and took out each frame, at the time, and sprinkled it well with fine dry sulphur. I then threw some down at the entrance, and the rest on the ground around the hive, with the most satisfactory results, as I have not had any more bee-paralysis in my apiary since.

Bees have done fairly well in this section this year. From 30 colonies I extracted 600 pounds, and had about 40 swarms. I did not extract until after all the honey-flows were past. I have 51 colonies in good condition now.

LEONARD LUNDQUIST.

Upsala, Fla., Sept. 7.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

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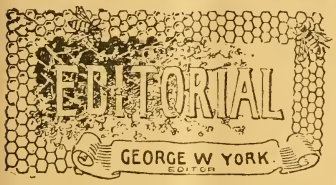


"**The Sun** may warm the grass to light,
And dew the drooping flower,
And eyes grow bright and watch the light
Of Autumn's opening hour;
But words that breathe of tenderness,
And smiles we know are true,
Are warmer than the summer-time,
And brighter than the dew."

The North American Convention—next Wednesday, Thursday and Friday—at St. Joseph, Mo. Don't forget to go.

The meeting will be held in the rooms of the Commercial Club, corner of 3rd and Edmond Sts., three blocks from Francis Street Depot. Take electric cars at Union Depot, and get off at 3rd St.

Mr. J. Van Deusen, Sprout Brook, N. Y., the flat-bottom comb foundation maker, called at the BEE JOURNAL office last Friday, on his way to the St. Joseph convention. He will visit a brother in Iowa before the meeting. Bro. Van Deusen is 80 years old, but no one would think him over 65 or 70. He is wonderfully vigorous, and we hope good for another 20 years, at least. New York is sure to have one representative at the convention, but we trust there will be present many more "wise men from the East."

Ho, for St. Joe!—Bro. Hutchinson, in a letter to us, suggests that all bee-keepers who are going to St. Joseph next week, and can possibly do so, please meet in Chicago on Tuesday, Oct. 9th, at 5 p.m., in the Commercial Hotel, northwest corner of Dearborn and Lake Streets, and then all go in a body to the Union Depot, to take the C. B. & Q. train for St. Joseph, which leaves Chicago at 6:10 p.m. All who get their through tickets *before* reaching Chicago, will please buy them over the C. B. & Q. road, and thus be able to join the crowd Tuesday evening. Let's fill a whole car, if possible, and have a pleasant time together all the way to St. Joseph.

The Editorial "We" will be exchanged for the singular pronoun "I" in *Gleanings* hereafter. And a new and neat editorial heading is used, with the name "E. R. Root" engraved thereon. The AMERICAN BEE JOURNAL still prefers to use "we" in its editorial department, though both the *Review* and *Geeanings* will now be putting in their "I's" instead.

Semi-Annual Meetings of the North American Bee-Keepers' Association *we* believe would be a good thing—yes, *two* good things every year. We have been thinking a little bit "along this line," and would like to make the suggestion of semi-annual meetings now, so that it may be considered at St. Joseph, next week, if deemed advisable.

You see, our country is so large that when the North American convention meets in the West, bee-keepers of the East are unable to afford the expense of going so great a distance, and when the meeting is held in

the East then those living in the West feel that they cannot bear the cost incident to attending the annual convention.

Now, it seems to us, in view of existing conditions, that it would be best to hold two meetings a year—one in the West, the first week in October, and another in the East, the first week in April. By such an arrangement the Association could have almost twice its present membership, and there would be two jollifications, or generators of bee-enthusiasm, instead of one each year as at present. These meetings would advertise the business of honey-production, the beneficial use of honey, and all else in connection with it, in such a way as no other agency could do. It would also help in many ways to insure unity of action in all matters pertaining to the best interests of bee-keepers themselves, and especially in the line of the great benefit bees are to farmers and fruit-growers everywhere.

Occasionally meetings could then be held as far west as California, and as far South as Texas. Maine and Canada would have the conventions, and thus there would be twice the opportunity there now is to hold the meetings in favorite cities or parts of our great country.

We believe this is a matter worth thinking about, for in so extensive a domain as is ours, the conventions of the North American must remain largely local in membership, and thus in most cases permitting only biennial attendance when it should at least be annual. There should be a grand rally of all the bee-keepers in this country every year, but the way things are now, it practically prevents the rallying of one-half of the clan by reason of their great distance from the place of meeting. Hold two conventions a year, and then all may be happy if they so choose.

Brethren and sisters, what do you think of our suggestion? Let's hear from the other bee-papers, too.

Dr. W. R. Howard, of Ft. Worth, Tex., had the misfortune to lose his horse and carriage (worth about $300) in a big livery-stable fire there on Sept. 11th. Over 40 carriages and 23 fine horses were burned, among them being one horse and a carriage each worth $1,200. We regret to learn of the Doctor's loss, and hope he may soon be "rigged" out again with a finer rig than ever.

Two Contributions to the "Langstroth Fund" that we received some time ago, and which we see that we have not as yet reported, are these: S. H. Clark, Elwood, Iowa, 60 cents; and John M. Seiler, Chanhassen, Minn., 35 cents. In all, then, there has been given to the "Fund," $92.40, during a little more than a year past, all of which we have forwarded to Father Langstroth. After sending him the last remittance, we received the following letter from his daughter, Mrs. Anna L. Cowan:

DAYTON, O., Sept. 24, 1894.

MR. GEORGE W. YORK.

Dear Sir:—My father requests me to thank you for your favor of Sept. 22nd, received by him to-day. He is grateful to you for the interest you have taken in his welfare, and appreciates the assistance he has received from his bee-keeping friends. His health is somewhat improved, but he still has but little relief from his head trouble. Respectfully yours,

ANNA L. COWAN.

Father L.'s many friends will be glad to hear that his general health is improved, and will wish for him yet many years ere life's end shall come and eternity's dawn appears.

Bro. Chas. F. Muth, of Cincinnati, Ohio, wrote us as follows on Sept. 26th:

FRIEND YORK;—I am advised just now by the C. H. & D. R. R. Co., that the rate for bee-keepers from Cincinnati to St. Joseph, Mo., and return, will be 1⅛ fare.

Yours truly, CHAS. F. MUTH.

We shall expect to meet a large number of bee-keepers next week from the region around Cincinnati. Our big and jolly-hearted Bro. Muth is able to head a good-sized delegation. Hope he will have the chance.

Harvest Excursion Tickets.—We open the "forms" of the BEE JOURNAL to say that we have just learned that the "Harvest Excursion Tickets" mentioned in connection with the St. Joseph convention, are good for *return trip only on Oct. 19th and 26th.* As the majority of bee-keepers would not care to wait so long after the meeting before they could return, it will probably be best to take advantage of the 1⅛ rate offered by the Central Traffic Association and the Western Passenger Association. Don't fail to get a certificate receipt when buying your ticket to St. Joseph.

Toronto and Buffalo are both being urged for the place of holding the next meeting of the North American. We have received splendid endorsements of the two cities named, by Wm. McEvoy and O. L. Hershiser, respectively. Mr. McEvoy urges Toronto, and September as the month, on account of the great Fair held there each year at that time. Mr. Hershiser urges Buffalo on account of railroad facilities,etc.

Not having room to publish the letters received in favor of Toronto and Buffalo, we make this simple mention of them. Personally, either place will suit us—we have no choice, but are quite willing to "go with the crowd" in this instance. We shall work for a good meeting, no matter where it is held.

Bro. Root almost "fell in love" with charming young lady in Michigan while on his bicycle trip recently. It was baby Fern Hutchinson!

Don't Forget—the C. B. & Q. (Chicago, Burlington & Quincy) is the *best* road to take when going to St. Joseph, Mo., next week. The "Harvest Excursion" is next Tuesday, Oct. 9th, and the rate is "one fare and $2.00" for the round trip; or the reduced rate for the North American convention by both the Central and the Western Passenger Associations, is 1⅓ fares for the round trip. *Be sure* to get a certificate when purchasing your ticket, and *also* take the "C. B. & Q." Train leaves Chicago at 6:10 p.m., daily, at the Union Depot, corner of Madison and Canal Sts., and is due at St. Joseph, Mo., at 9 o'clock the next morning.

Reduced Railway Fares. — As stated last week, the Central Traffic Association grants 1⅓ rates on the same conditions as those named on page 431 of this number of the BEE JOURNAL. The territory of the Central Traffic Association extends from Lakes Michigan and Huron to the Ohio River, and from Toronto, Buffalo, and Pittsburg westward to Chicago and the Mississippi, and includes, therefore, Michigan (south peninsula), Southern Ontario, Western New York, Western Pennsylvania, Ohio, Indiana and Illinois (except northwest part).

VERY IMPORTANT.—Certificates must be obtained from local agents when purchasing *going* tickets, and must be presented at the Convention to be countersigned by the Secretary, or no reduction can be obtained on return ticket. The rate is not secured unless 100 certificates are presented, *therefore do not fail to secure a certificate when you purchase your ticket*, whether single or round trip, and no matter whether you intend to take advantage of the reduced fare or not. Tickets are valid Oct. 6th to 15th, inclusive.

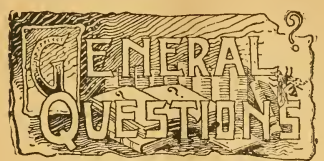
Rev. W. R. Mundhenke, Wheeling, Ill., dropped into our office last week. He is much interested in bees, and doubtless we shall have something from his (fountain)-pen some day.

Miss Mattie Edwards, daughter of Mr. D. M. Edwards—one of the largest bee-keepers in southwest Texas—was drowned Aug. 30th, in the overflow at Uvalde, Tex. She was 16 years of age. All will sympathize with Bro. Edwards in the loss of his beloved daughter.

Pres. Abbott, of the North American, is making a tour of Missouri in the service of the State Board of Agriculture, lecturing at all the principal places on bees and bee-culture. Missouri knows how to do things. So does Pres. Abbott. Result—the spread of valuable bee-information. Which State will be next to thus honor itself?

Dr. Peiro now fully expects to be at the North American convention next week. E. R. Root said in last *Gleanings* that he'd like to see Dr. Miller and Dr. Peiro at a convention together—he thought there'd be lots of fun. Well, if he wants to see that combination of Doctors, he'll have to be at the St. Joseph meeting. But we understand that Medina will be represented by Bros. A. I. Root and J. T. Calvert, and Ernest Root will have to stay at home to "keep house." It's too bad that *all* can't come, but then, Bro. E. R. has just recently been "kiting" around the country on his bicycle, so we presume he's content to remain at home this time, and let his father and broad-shouldered Canadian brother-in-law go.

Great Premium on page 444!



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Maple Sugar for Wintering.

What kind of a feed for bees would maple sugar or syrup be, especially for wintering? That is, diluted with water to the common proportion of granulated sugar syrup. T. E. D.

Lexington, Ohio.

ANSWER.—Root's "A B C of Bee-Culture" says: "Maple sugar, poured into wired frames while hot, makes excellent bee-candy. Cakes of maple sugar laid over the frames answer equally well." I have some doubts whether it would be as well made into syrup, for there is some tendency in maple sugar to attract moisture, and it might become too thin. Very likely there is a difference in this respect in different lots. On the whole, I think I would rather have granulated sugar syrup if I couldn't have good honey.

Untested Queens in the Fall.

1. Do you consider the fall of the year a good time to introduce young laying queens?

2. Would you advise a person to buy queens this time of the year, or not?

3. What do you think of the young queens that are being offered at 50 cents apiece? Are they just the thing for one to buy for the purpose of improving his bees? Or would it be better to wait until spring, and buy tested queens?

Anamosa, Iowa. F. M. W.

ANSWERS.—1. I have often seen it stated that fall is a good time for introducing queens, and I don't remember seeing anything to the contrary. Not having much direct experience myself, I have just looked over a number of books, and am surprised to find nothing about it.

2. A queen successfully introduced in the fall has the advantage that in the spring there is no stoppage in laying caused by introducing, and queens can be bought for less money in the fall. On the other hand, there is the danger of loss in wintering.

3. At the same price, I'd rather have a tested queen in the spring than an untested one in the fall, or indeed any time. But if from the same breeder I can get three or four untested queens in the fall for the same price as one tested queen in the spring, I believe I would take the untested queens. For if he is a reputable breeder, the probability is that most of his bees are purely mated, and in the three or four you would stand a good chance of having two queens as good as his tested one. If a breeder has a lot of queens to get rid of in the fall, I don't know any reason why they should not be just as good sold at 50 cents each as if he sold the same queens for a dollar. But I think some breeders claim that they cannot be afforded at so low a price.

Keeping Honey in Barrels.

Will honey in barrels keep good? Or is there danger of it getting sour in a warm climate? E. M. K.

Cape Charles, Va.

ANSWER.—I've had no experience in that line, but from what I know of honey in general, I should think there might be danger. C. F. Muth is the man who can tell. In any case I should want such honey thoroughly ripened, and if possible taken from combs without pollen.

Fall Extracting and Uniting.

I make one artificial swarm a season by dividing, and have got to the limit of colonies I wish to keep, and now require some information. After the breeding season is over late in the fall, can I extract good, clean honey from the frames, using a honey extractor? Can I return these frames to the hives, which are porticos, nailing wire-cloth over, put them in a cool, dry place, and in that way preserve them for next season's use?

Then what shall I do with those bees? Will it do, after killing off the old queen,

to shake off the bees from the frames of both colonies in front of the hive, and unite in this way, or is there a better way? Had I better smoke them? Is there any danger to the queen in adding so many strangers? If this management would do, I should have the laying of each queen two seasons, and should have the old, infirm queen to be superseded; and then I don't need to be in a fever of excitement during swarming-time. S. H.

Prosser, Nebr.

ANSWER.—Yes, you can extract "good, clean honey" from the frames late in the fall, providing the honey has been gathered from good sources. A good many years ago I had the editor of our local paper come to see me extract honey. I was somewhat chagrined when I put the combs in the extractor and turned and turned, to find no honey coming out of the combs. The honey was white clover, very thick, it was late in the season, cold, and the honey utterly refused to leave the comb. So you may have to put your combs in a warm room for 24 hours.

No, I wouldn't put away the sticky combs in the way you propose. I would first have the bees clean them off. You can put a hive full of combs under or over a colony. Or, you may perhaps do better to have them cleaned up a few rods away from the bees.

If you set out a single frame where the bees can get at it, they'll clean it very clean, but they may tear the comb pretty badly. Set out a hive full, leaving only an entrance for two bees at a time, and they'll clean it up without injuring the combs.

If you have a big lot of them to clean up at one time, take B. Taylor's plan. Scatter the combs so that the bees will have free access from all sides, and then they'll not need to gather by the hundred on a little spot and tear the comb. It will work perhaps as well to have the combs in hives, each hive uncovered.

I have never had much experience in your proposed plan of uniting, but it is well spoken of. If you feel uncertain about the queen, put her into cage stopped with "Good" candy, and let the bees eat her out. Yes, smoke them.

Try uniting some of them this way: After destroying the queen of one colony, set the other colony over it, leaving an entrance to each hive, but allowing no direct passage from one to another except a place large enough for two or three bees to pass. In a day or two enlarge this passage, and in two or three days more allow free communication.

Then at any time you like you can take away half the combs.

Keeping Syrup from Granulating.

In what way can I make granulated sugar into syrup for bee feed to keep it from granulating in the comb?

Onsted, Mich. L. E. E.

ANSWER.—There seems to be some uncertainty about the matter. Some have no trouble under any circumstances, while others have the syrup granulate in the combs badly even when using acid. There may be something in the sugar, and I think there's a good deal in the way it's fed. I have always used an even teaspoonful of tartaric acid to 20 pounds of sugar, stirring it in just after taking the syrup off the stove, the acid being previously dissolved in a little water. This year I am using no acid, but feeding without boiling, using a pint of water to a pound of sugar. I don't think it will granulate. See the article on "Feeding Simplified," in this number of the BEE JOURNAL.

Increasing the Size of Bees.

1. What does Mr. Faylor refer to on page 369, 6th?

2. Can't some one tell us *how* to increase the size of the honey-bees?

Englewood, Ill. J. E. A.

ANSWERS.—1. Mr. Faylor refers to the large bees reared by Dr. J. P. Murdock, of Florida. They are of such size that comb built by them is considerably larger than common. I have seen some that were about half way between ordinary drone and worker, and other of the worker-cells were about as large as ordinary drone-cells. Drone-comb was of course larger.

2. Dr. Murdock is probably the best man. He says he turned his direction particularly to the drones, and I think fed them in the larval state. The easiest way to increase the size of your bees would be to get some of his stock.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Pimples on the Face.

Louis E. S. writes for a treatment for pimples—usually called "black heads."

In the first place, dear Louis, it is always necessary when writing to doctors for advice, to state your age and occupation, as both are essential factors in determining the probable cause. So I must infer you are perhaps 16 or 18, going to school, and living on the farm. So far so good. A boy's habits have much—nay, everything—to do with the occurrence of these pimples. They are an unsightly eruption, always carrying the conviction of filthy habits, and hence a great humiliation. These "black heads" are not really worms, as some suppose, but diseased roots of the hairs; but why the trouble should manifest itself especially on the face and neck is a matter of conjecture. Exposure to light and weather is perhaps the principle reason of occurrence on these parts instead of the more protected ones, under the clothing.

As before mentioned, there are a number of causes for the appearance of these pimples, and besides such as we do not mention in print, are those of diet and cleanliness. Insufficient or improper food is one of the chiefest. Greasy dishes, whether of meat or pastry, are responsible for a large number of eruptions. Pork, in any form, is one of the worst. Salt meats are bad. Eating rapidly, without time for proper mastication or digestion, necessitating the flooding of the stomach with big drafts of water, or, worse still, numbers of cups of tea or coffee, is one of the quick methods of bringing out these pimples and establishing an enduring dyspepsia at the same time.

All unclean habits, whether local, from want of cleanliness, or constitutional from immoral practices, lead to the permanent establishment of these diseased hair-bulbs which finally disfigure an otherwise pleasant and intelligent face. To suggest their discontinuance should be considered the common-sense course to be followed.

The diet should be a plain but nutritious one, consisting principally of fresh fish, vegetables, fruits, eggs, soups, and the coarser grains—rolled oats and cracked wheat.

The cold morning bath is indispensable, with good, hard rubbing in drying. At night a towel wrung out of as *hot* water as can be borne, held to the face for a few moments, will do great good.

As a remedy use No. 11, night and morning (if you have one of the Family Medicine Cases advertised in the AMERICAN BEE JOURNAL). Continue the remedy for several weeks, until all the pimples have disappeared. This line of treatment will be certain to cure you if persistently and faithfully used.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.
Oct. 10-12.—North American, St. Joseph, Mo. Frank Benton, Sec., Washington, D. C.

1895.
Jan. 28.—Venango Co., at Franklin, Pa. C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill. 147 South Western Avenue.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 448 for advertising offer.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

Have You Read page 444 yet?

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Look Out for the Rattle-Trap Man.

Willie tells me that he met a man a few days ago, down near the coast, with a rattle-trap he called a patent bee-hive; that he had sold "rights" to all the leading bee-keepers in the country; and that A. I. Root had written him a barrel of letters trying to buy the sole right to make his hive, and he would not sell it to him! When Willie pinned questions close to him, he soon found that the fellow knew nothing of bees, and was a general fraud. He spoke to Willie in the following language: "Young man, do you think you can learn me a d—d thing about bees?" Willie left him at this point, and says, "Look out for him; he is a fraud!"

JENNIE ATCHLEY.

A Case of Foul Brood.

MRS. ATCHLEY:—I send you a sample of what appears to be foul brood. Will you please inform me if it is, and what to do? The combs are full of honey. Can the honey be saved by heating? Will bees winter safely on such honey?

D. LINDBECK.

Bishop Hill, Ill., Sept. 10.

Friend L., the foul brood arrived, and I happened to be at the office myself when it came, and I detected the foul brood by its odor before I opened the box or saw your letter. It is surely foul brood in a bad stage, and I am real sorry for you. Now, in giving advice in such matters, it is necessary to know more of the particulars before an intelligent answer can be made. But if you have only a few colonies, I would simply burn lock, stock and barrel, and get some more healthy bees. But if you have a large apiary, or say 20 to 50 colonies I would try Mr. McEvoy's cure. He is curing it right along in Canada, and I see no reason why you could not cure it in Illinois the same way. Dr. Howard's little foul brood book will give the plan—25 cents at the BEE JOURNAL office.

I would not like to use the honey at all for feeding bees any more, or for any other purpose. But if you will add one-fourth water, boil it 15 minutes, skim well and strain it, I do not think it would give the bees foul brood, or hurt them in any way, but be careful not to scorch the honey, as burnt food is not good for bees, especially when they are not active or flying.

JENNIE ATCHLEY.

Non-Swarming Bees Again.

Dr. Miller thinks he must have the non-swarmers I classed as being of no account. I did not mean, Doctor, that non-swarmers, on account of poverty, would likely be of no account. It was bees that were prosperous, and in years when we have *good honey* seasons; and I do believe that when a race of bees is found that will let a good honey season pass (or come and go), and show no disposition to swarm, that they will, as a rule, be worthless, because it is against *nature*, and *never will* be the case, in my opinion.

JENNIE ATCHLEY.

Bee-Keeping in Australia.

MRS. ATCHLEY:—"So that we may become acquainted," as some of your American advertisements run, I enclose a newspaper notice of my apiary, and a sketch of my countenance into the bargain. You see I am following a similar occupation to yours, and as "a fellow feeling make us wondrous kind," as a certain Englishman, yclept William Shakespeare, remarked, I find I entertain that quality towards yourself, and I presume it will not be entirely unreciprocated. I may also inform you that I am a regular reader of the AMERICAN BEE JOURNAL and *Gleanings*—the two leading apicultural papers of your country—and a casual reader of several others.

From your numerous writings, and dtscriptions of your "new location" by others, I can almost fancy myself at Beeville, witnessing transportation of bees in your covered wagon, and Willie busy forming his queen-cups and transferring larvæ, etc.

Perhaps a word or two about this re-

gion of the earth may interest you. Likely you are already aware that the prevailing flora (at least the forest flora) belongs to the eucalyptus order, commonly called "gum-trees," on account of the gum resin which oozes out from any wound in their bark. The timber of most of the species is extremely hard and durable—a bridge near here has just been renewed, and piles of the original bridge were dug up quite sound after 60 years in the ground! But the bloom of the trees have the greatest interest to the bee-man.

Most sorts bloom with the greatest profusion, and are marvellously mellifer-ous. One bee-keeper has taken over 1,000 pounds each from some of his hives during the past season. The honey varies from dark to the palest amber, and, if properly ripened, has great density. Some sorts possess rather a pronounced flavor, which is in a milder degree common to all eucalyptus honey. In fact, some samples of this honey give one the idea that it has been derived from orange or almond blossoms.

Then near cultivated tracts we have white clover in abundance, lucerne (called by Americans "alfalfa"), pumpkins, and other crops, besides a vast number of flowering shrubs and vines (wild), all more or less honey-yielding.

As for our bees—as in America, so here—the old black German was the pioneer, and has spread through nearly the whole of this continent. Tons of honey are obtained from their nests in hollow forest trees. But some 20 years ago Italian bees were imported, and their superior qualities being so manifest, all pretending to any standing in apiculture, have secured Italian blood. Many Australian bee-keepers make regular annual importations from Italy (Bologna) in batches of eight; and more recently extensive importations are made from America.

C. MANSFIELD.

Maitland, N. S. Wales, June 6.

The above is only a portion of Friend Mansfield's letter—the rest being purely business, I of course omit it. I am sure all the readers of the BEE JOURNAL will be greatly interested in what our Australian bee-friends are doing, and will be glad to know that they are a wide-awake and progressive class.

JENNIE ATCHLEY.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

Prevention of Burr-Combs.

Query 943.—What will prevent the bees from building comb between top-bars and sections?—Ohio.

A honey-board.—R. L. TAYLOR.

Correct bee-spaces.—J. H. LARRABEE.

Correct bee-spaces.—MRS. L. HARRISON.

Correct spacing is a great help.—H. D. CUTTING.

The proper spacing, in part; nothing entirely.—A. J. COOK.

Deep, wide top-bars of frames, and proper bee-spaces.—C. H. DIBBERN.

Anything that will make the space small—⅜ of an inch.—JAS. A. STONE.

A slat honey-board and proper spacing—5/16 of an inch.—J. A. GREEN.

Wide and deep top-bars, and a scant bee-space with joints broken.—DADANT & SON.

A little less space. Occasionally a change of queens is necessary.—P. H. ELWOOD.

I don't know, unless it would be only or barely a bee-space left between them.—MRS. JENNIE ATCHLEY.

A correct bee-space—5/16 of an inch—with proper width and depth of top-bar.—G. M. DOOLITTLE.

Top-bars ⅞ of an inch deep and bee-space—just deep enough for bees to move freely.—S. I. FREEBORN.

Proper spacing will obviate the difficulty largely—¼ to ⅜ of an inch, is about right.—J. M. HAMBAUGH.

Space the frames just bee-space apart, will as nearly accomplish the matter as any one thing will do.—J. E. POND.

Small space. Put on a queen-excluder, and then put the case of sections on the zinc—with no space between the sections and the zinc.—E. FRANCE.

Wide top-bars, with bee-space between top-bars and surplus sections. The edges of the top-bars should be about ¼ inch wide.—MRS. J. N. HEATER

Wide top-bars and ¼ inch space between super and frames will come near enough to it for all practical purposes. —EMERSON T. ABBOTT.

Use a honey-board. But if there is a full ¼-inch bee-space, a good honey-flow, and plenty of bees, I am never bothered much in this way.—J. P. H. BROWN.

Having them just the right distance apart, and having the top-bars and the bottoms of the sections as smooth as possible. Painting the top-bars helps much.—M. MAHIN.

A bee-space, the thickness of the fore-finger, will answer as well as anything. We have to expect a few brace-combs here and there; they do no serious harm.—W. M. BARNUM.

Some say a space of ¼ inch between the top-bars and sections. I have been successful by combining with that a top-bar 1⅛ wide and ⅞ thick, having ¼ inch between top-bars.—C. C. MILLER.

Deep top-bars, so spaced that only ¼ inch between the tops of the frames and ¼ inch bee-space between the top-bars and sections. Or second, with the common V top-bar frame use a Heddon slatted honey-board between the frames and sections.—EUGENE SECOR.

Have the top-bars heavy enough to not "sag a bit," so that the bee-space can be kept accurately at flush ¼ of an inch, between the bottom of the case and the tops of the top-bars. If this will not hinder the burr-comb nuisance, "come again," as the doctors say when they have prescribed a "dose." It has occurred to me that if there is anything dearer to the heart of the honey-bee than a little knot of wax on top of the frame—well, I give it up for want of room.—G. W. DEMAREE.

REDUCED RAILWAY FARES TO ATTEND THE NORTH AMERICAN AT ST. JOSEPH, MO., OCT. 10TH, 11TH AND 12TH.

The Western Passenger Association, under the conditions named below, will grant reduced railway fare to those who travel over their roads and attend the meeting of the North American Bee-Keepers' Association at St. Joseph, Mo., Oct. 10th, 11th and 12th.

Conditions.—Full fare will be charged going. Return-tickets will be issued at *one-third the regular fare*, provided the purchaser presents a certificate from the agent of whom he obtained his ticket, and provided also at least 100 such certificates shall be presented. There can be little doubt on this last point, especially as special round-trip excursion tickets, even such as are issued to parties of 10, 25, or more, traveling in a body, will count toward the 100, provided each purchaser is careful to secure a certificate of purchase from the ticket agent who sells him the ticket, and to present this certificate at the convention to be countersigned by the Secretary of the Association.

Therefore *do not fail to secure a certificate when you purchase your ticket, whether single or round-trip, and no matter whether you intend to take advantage of the reduced fare or not.* It may aid others in obtaining the reduction.

Time of Tickets.—Valid Oct. 6th to Oct. 15th; that is, they may be purchased three days (not counting Sunday) before the first day of the meeting, and the return-ticket may be obtained any time up to the night of Oct. 15th.

Railways.—The following are the roads included in this reduction: Burlington, Cedar Rapids & Northern; Chicago & Alton; Chicago & Northwestern; Chicago, Burlington & Northern; Chicago, Burlington & Quincy; Chicago Great Western; Chicago, Milwaukee & St. Paul; Chicago, Rock Island & Pacific; Chicago, St. Paul, Minn. & Omaha; Hannibal & St. Joseph; Kansas City, St. Joseph & Council Bluffs; St. Louis, Keokuk & Northwestern; Illinois Central; Iowa Central; Minneapolis & St. Louis; Missouri Pacific; Rock Island & Peoria; Sioux City & Pacific; Wabash; Wisconsin Central lines.

When necessary to pass over more than one line, and in case a through ticket with a certificate cannot be obtained, it will be necessary to obtain a certificate from each agent from whom a ticket is purchased, in order to entitle the holder to the reduction on return ticket.

Those who do not live within the territory covered by these lines should, wherever practicable, purchase a local or a round-trip ticket to the nearest line named above, and secure there a ticket to St. Joseph, with certificate of purchase.

Further notice will be given in case other railway lines grant reduced rates.

Harvest Excursion.—Some may be able to take advantage of the "Harvest Excursion" rates (one-half fare plus $2.00) given Oct. 9th, full particulars of which can be obtained of your local agents.

Change of Date.—Note the change, as announced by President Abbott, in the date of the meeting from the middle of the month to Oct. 10th, 11th and 12th.

Place of Meeting.—The convention will meet in the rooms of the Commercial Club in St. Joseph, at the corner of 3rd and Edmond streets, three blocks from Francis Street Depot. Take electric cars at Union Depot and get off at 3rd street.

FRANK BENTON,
Sec'y. N. Am. Bee-Keepers' Association,
U. S. Dept. Agriculture,
Washington, D. C.

VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

CONSTITUTION AND BY-LAWS OF THE N. A. B.-K. A.—I don't know just why the publication of the Constitution and By-Laws of the North American have been called for (see page 361) unless it be to see whether something in them needs mending. Certainly they were not carefully considered by every one at the time of their adoption six years ago. The report of that convention says they were adopted "with but a very little discussion or consideration." Indeed I have no distinct recollection that there was any discussion. Not, I think, that any one tried to rush them through, only that no one seemed to care enough about it, and the committee that had been appointed a year before to report on them, had perhaps forgotten all about it.

Possibly it doesn't make so very much difference what they are, for the principal thing that bee-keepers want when they get together is to have a good, practical bee-talk. Still, if they are to be reconsidered, it might be well to have some changes and omissions, and it may not be out of place to call attention to a few points.

In Art. III, item 1, says: "This Association shall consist of its officers, life-members, annual members, honorary members, delegates from affiliated local associations, and ex-presidents." Why should officers and ex-presidents be mentioned?

The payment of $1.00 makes any person interested in apiculture an annual member, no vote being needed, but a life-member must not only pay his $10, but receive a majority vote. Why?

I think no mention is made as to the particular time when the President goes out of office. For very good reasons, it has been the custom for years, for the President to continue in office until the close of the annual convention which occurs in the year following the year in which he is elected. Might it not be well to have this mentioned?

Art. IV of the By-Laws makes it the duty of the Secretary "to call the names of the members of the Association at the opening of each annual meeting." Is this desirable? Has it ever been done? What use at St. Joseph to call the names of those who attended last year at Chicago?

Perhaps I would better hold up, for a whole lot of things more need consideration if anything is to be considered.

KISSING.—Look here, Mr. Editor, can't you speak to Dr. Peiro and tell him to keep in his place? There he goes on about kissing, on page 364, and kissing is neither a medicine nor a disease. Hold on, let me think. I'm not sure but it is a

disease sometimes. I think I've known some pretty severe cases, both acute and chronic, some incurable. Come to think of it, it's a medicine too, at least sometimes. In some cases it has a remarkably stimulating effect. Say, Mr. Editor, never mind speaking to Dr. Peiro.

Drones and Swarming.—In view of the replies on page 367, it hardly seems that drones or no drones has anything to do with the matter of swarming. As a rule drones are present at swarming, not because they are necessary for swarming, but because the conditions necessary to produce swarming will also secure the presence of drones.

Mating and Laying of Queens.—Rev. W. P. Faylor is an exasperating sort of individual, when on page 369 he speaks of "the fact that bee-keepers can mate their queens with the very kind of drones desired, right in a country or neighborhood surrounded with black bees," and then doesn't say a word about how it's done. Bro. Faylor, tell us who, where and how.

He also leaves us in some suspense in giving that interesting item about the queen laying, for the very point in the case that we'd like to know about he says nothing about. That queen that lays eggs in new comb before the cells are fully drawn out—does she use this new comb in preference to the old; that is, are there empty cells that she does not use in old combs on each side of the new comb?

Herr Reepen, commenting on this in *Centralblatt*, thinks my observations ought not to be considered conclusive, as the entrance plays an important part—meaning, I suppose, the position of the combs with regard to the entrance. I can readily see that would be the case where combs hang parallel to the entrance, but my combs are all perpendicular to the entrance.

Spacing Combs.—What in the world does that man mean in that paragraph on page 370, about brace-combs? "He says, "But I space 1⅜ from center to center, to 1⅛." I've read it over and over again, and can't make any sense of that "to 1⅛." Wonder if he doesn't mean "instead of 1⅛."

Introducing Queens.—That's an unusual case, I think, mentioned by Lawson Hegler on page 376. I have introduced a great many queens by simply putting them on the combs after queen-cells were sealed, and have met some losses in that way, but in case of loss the queen was always killed without commencing to lay.

That convention report on page 379 is an improvement.

Marengo, Ill.

PACKING BEES FOR WINTER.

BY ELMER TODD.

The wet leaves spoken of by Mr. Chas. Dadant, in his article on page 340 (6th paragraph), can be almost entirely prevented by leaving an empty space of from 4 to 6 inches above the leaves, chaff, or whatever other absorbent is used above the bees.

In preparing for winter, I put on a 10-inch extension and ½ story telescope cover, with a ¾-inch hole in each side of it; fill the extension full of leaves or chaff in a burlap cushion, having the cushion big enough so the packing will go in loosely and fit down into the corners, then put on the cover. I have yet to see a colony come out in the spring with the absorbents wet when so prepared. I have prepared for winter, as above, for four years in southeastern Nebraska, and never lost a

colony thus prepared. I have successfully wintered 2-frame nuclei on the summer stands with the same preparation, excepting that I filled the vacant room below with the same kind of absorbents as was used above.

I have used ground cork, oats and wheat chaff, cut wheat and oats straw, flax straw, cottonwood and box-elder leaves, and clover hullings—all with good results. I prefer the different packing mentioned in the order named above, ground cork being the first choice, as at no time is there any signs of moisture about the upper story, while with chaff or leaves, during a cold spell with the thermometer anywhere between 15° and 30° below zero, if the cover is lifted a light frost would be standing on the top of the burlap cushion, but the absorbents would be dry just below the top of the cushion, and the frost would melt and pass away when the weather warmed up. They needed attention during winter at no time only after a blizzard or hard driving snow-storm, when I examined all hives and brushed out what snow drifted in above the cushion, before it had time to melt. At such times it would drift in through the joint between the cover and extension, and the auger-holes in the cover, if I failed to close them before the storm, as I sometimes did.

If the cover fits perfectly tight, I think these auger-holes play an important part in allowing a circulation of air above the cushion.

One fall I packed six hives with the covers fitting down to the cushions with no vacant space above. When unpacked, the following spring, the cushions were rotted so they would not hold together, and the chaff in them was wet and starting to rot; but the bees were in good condition, and no signs of moisture below, excepting a little dry, bluish-colored mildew on the outside combs. In these cases the moisture was the greatest on the top of the cushion next to the cover, which was also wet.

Virgil City, Mo.

GREAT LOSSES FROM FOUL BROOD.

BY WM. M'EVOY.

Enclosed please find a copy of a letter received from a bee-keeper in New Zealand, who is, and has been, sorely troubled with foul brood. By publishing Mr. Stevenson's letter, and my explanations why he failed to cure his apiary of foul brood, it may be the means of helping many of the unfortunates to cure their apiaries of that disease.

Waerengaahika, Gisborne, New Zealand, June, 1894.

MR. WM. MCEVOY.—*Dear Sir* :—I am exceedingly obliged to you for taking the trouble to write me so long and valuable a letter. About a year ago I read a preliminary article of yours in the AMERICAN BEE JOURNAL on foul brood, and after some delay a further article was to appear giving your method of curing the disease. Why, I do not know, but that number of the JOURNAL, which I had been getting regularly from A. I. Root with *Gleanings*, miscarried.

When I started keeping bees in 1883, there was no such thing as foul brood known in this district, and a great number of colonies were kept all in box-hives. I was the first to use frame hives and an extractor. In 1884 foul brood appeared in a large apiary of 500 colonies, and in two years not a colony was left. Gradually it crept up the country, and the next year I noticed it in one of my hives, which I destroyed, but in the following spring the early brood was all diseased. By removing these frames, however, all the summer brood seemed healthy.

Meantime another box-hive apiary of 400 colonies, two miles off, was struck, and the owner let it run riot, throwing out rotten combs in heaps for the bees to feast on, and spread destruction to every hive. Soon silence reigned in that apiary also, and I was left in possession of the field. At this time the Cheshire cure was all the talk, and I worked away, spraying and medicating combs, but with no effect. It only got worse. I was now reduced to 50 colonies, and when these swarmed I

hived the swarm on foundation, and after a second swarm issued I shook the bees remaining in the hive into the swarm, and destroyed the combs. This checked the trouble for a time. Next year I had very strong colonies, and increased my stock to 300, securing a crop of nine tons. That was three seasons ago.

The spring following (1892) many of the colonies had foul brood, and in the autumn, as recommended by D. A. Jones in his book, I shifted them all into empty hives, and fed them on sugar syrup. The weather was fine, but the honey-flow had entirely ceased, and I found it impossible to prevent the bees from getting at the honey taken from them. They drew out the foundation I gave them, and seemed to be wintering all right, but when spring came they dwindled away, and I had only 40 colonies left in the home apiary, and 70 in an out-apiary two miles away. These I did not interfere with, and they wintered much better.

Last summer I had every intention, when the flow came, to adopt your method, but such a season was never known here before. I hope we will not have another like it. The early spring was fine, but in October rain set in and continued day after day until the middle of January, so that working with bees was impossible, and we never had a honey-flow at all. In January and February I extracted a little honey brought in chiefly by the hybrids, about 2,500 pounds in all—the smallest crop I ever had from so many colonies.

For years we had only the black bee, but I now get Italian queens from America, and hope next season to work out the black strain. I find an immense difference in their honey-producing qualities. I have all along paid great attention to the get-up of my honey, and the result is that my brand is well known in the large towns, and my only difficulty is in producing enough to fill my orders. I have also been successful at taking awards at every exhibition in Wellington, Dunedin and Melbourne, and by request of the Government, I had a display in the Colonial Exhibition in 1886.

Now to answer your questions about New Zealand as a honey-producing country:

The coast-line running from north to south, nearly 1,000 miles, there are all sorts of climates, sub-tropical in the north, and somewhat bleak in the south. In the north are great forests, and all the trees are more or less honey-bearing. In its natural state there are no flowers on the ground in New Zealand, as in some parts of Australia, it is all overhead. The swamps are full of flax, which yields immense quantities of honey, but of rank flavor, and it may be said of New Zealand bush honey in general, that there is plenty of it, but the quality is poor.

In rich alluvial plains, such as this district, the bush has disappeared, the swamps are drained, and the whole country is laid down in rye grass and clover as pasture for sheep and cattle. The climate is mild and humid. Oranges and lemons thrive, and there is very little frost. The winters are wet, as a rule, and the summers fairly dry, but we have no two seasons alike, and the weather is very changeable. Spring begins in August, when the willows, which line the rivers, come into leaf, and the bees get some honey from them. Then comes such bush as is left in patches in gullies, among the hills, or groups of cabbage palms left in the paddocks. Every year this scource gets less and less, and is not to be relied on. About the middle of October the clover opens, and bees begin to swarm, and continue swarming all through November, or, if the weather is bad, begin November and continue until Christmas. A great many of these swarms swarm again in January and February, so in a good season increase is easily attained. The honey crop comes from the clover, and, as with you, from the thistle which blooms in January. With us, however, clover continues all along, sometimes yielding well in February. Most farmers drive the stock from the paddocks in November, and close them for rye-grass seed until Christmas, so the bees have a good show, and when the machines have cut the grass, if good rain falls, clover comes up again, and flowers better than ever. The thistle honey is certainly the most delicate and whitest we have. Unfortunately in all the paddocks closed for grass seed, they are entirely destroyed, being entirely cut down by the machines before they come into flower, but in the paddocks of the dairy farmers, and along the roadsides, they still abound, and are a valuable plant for the bee-keeper.

Here we have no fall honey, which is a great pity, as we often have beautiful autumns. This year, for instance, after all the rain, March and April were lovely months, but useless for the bees. Still, in a good season a strong colony will yield 70 or 80 pounds of honey, and stores for winter besides. I extract almost all my

honey, and there is a greater demand for extracted than comb honey. The price of honey is always a puzzle to me. The Wellington traveler of a large firm tells me he gets all he requires at 3 cents, and yet grocers in the same town pay me 4¼ cents, and in Dunedin I sometimes get 5 cents in 60-pound tins. I consider 4 cents a fair price, and am contented, if it gets no lower.

It is difficult to arrive at any conclusion as to the prevalency of foul brood in New Zealand. There is a bee-column in the *New Zealand Farmer*, but bee-keepers never write in it, and it mainly consists of clippings. There is a bee-journal in Australia, and there are many extensive bee-keepers in that country. Our honey is thought more of in London than theirs, which is chiefly gathered from gum trees.

I shall look forward to the arrival of your kind gift of Dr. Howard's book. I hope it will be in time for next spring's operations. Again thanking you for your letter, I am, Yours very truly, GEORGE STEVENSON.

Mr. Stevenson failed, like all others in the world, when he followed the Cheshire method, and tried to cure his apiary of foul brood by spraying and medicating the combs in foul-broody colonies. The germs of foul brood are very hard to kill, and any drugs that would be used strong enough to destroy them, would kill all the bees and all the good brood in the unsealed cells, and then leave the disease just as bad as ever in the sealed brood and capped honey. No foul-broody apiary was ever cured, or ever can be cured, of that disease by drugs of any kind.

When Mr. Stevenson's colonies swarmed, if he had shaken the bees remaining in the hive into the swarm, and destroyed the old combs, then hived each swarm on comb foundation starters, his bees would have drawn out the starters in four days, and stored the most of the diseased honey which they took with them from the old combs. Then by removing the new combs made out of the starters, the fourth evening, and giving full sheets of foundation, he would have made a perfect cure in every case so treated.

In the honey season, when the bees are gathering honey freely, any apiary can easily be cured of foul brood by removing the combs *in the evening*, shaking the bees back into their own hives, and giving them comb foundation starters for four days to work out, and store the diseased honey in, which they took from the old combs. Then in the evening of the fourth day, by removing the new combs made out of the starters, and giving full sheets of foundation, the cure will be complete in every case.

When the honey-flow stops, this same method of curing can be continued right along by feeding plenty of sugar syrup in the evenings. All the old combs *must be* burned, or made into wax, and all of the combs made out of the starters during the four days must be made into wax also or burned. All the work should be done in the evenings, so as to have no confusion, mixing of bees, or robbing done to spread the disease.

I feel certain that if Mr. Stevenson, who is a good bee-keeper, had known of my methods of curing foul brood at the time he was trying other plans to cure, and had carried out my methods of curing the disease, he would have cured every colony in his large apiary, and secured more than the nine tons of honey the following year.

Mr. Stevenson, of New Zealand, is one of the leading bee-keepers of the world, and being a man of so much push, pluck and energy, I would be very much pleased to have my method of curing foul brood thoroughly tested by him.

Woodburn, Ont., Canada, August, 1894. WM. MCEVOY.

[The major portion of the foregoing article appeared in the *Canadian Bee Journal* for September. Mr. McEvoy, after making some alterations, desired its publication in the AMERICAN BEE JOURNAL also.—EDITOR.]

EAST TENNESSEE HONEY-YIELDERS.

BY H. F. COLEMAN.

So many persons are making inquiry as to the honey-producing plants of East Tennessee, that I think it advisable to answer through the columns of the AMERICAN BEE JOURNAL. But to those interested I will say that my answer will be confined to the mountainous parts of East Tennessee. The flat lands, however, are well adapted to honey-producing, but the mountainous sections of East Tennessee, in my opinion, can be excelled in but few parts of the United States.

In the early spring we have elm, willow, fruit-bloom and other flowers. Later in the spring come buckeye, locust and blackberry. Locust blooms every other year, but the blackberry is a sure bloomer, and a good honey-producer. White clover and poplar come simultaneously, and both are plentiful.

Poplar is a sure producer, and in my opinion is the greatest producer of all the honey-producing plants or trees. The only difficulty with the poplar is, that it blooms rather early, and it takes care and attention to have the bees in a condition to gather from it. In this locality bees usually gather it 20 to 30 days. It usually begins blooming by May 15th, and continues until in June.

Basswood comes next, and is plentiful along the rivers, in the coves, and on the rich north lands. It does not bloom so long as the poplar, and is not as sure a producer, though it seldom if ever entirely fails. Sourwood and basswood lap—the sourwood beginning to bloom the latest, and it is probable that the sourwood, in a measure, gets credit that is due the basswood. Basswood usually begins to bloom by June 20th—sourwood by July 1st, and sourwood continues, if a fair season, until the first of August. Sourwood produces more or less every year, and some years enormously. The honey produced from it is lighter in color than that produced from basswood, and is equal to it in flavor.

Golden-rod and asters abound, and with us are next to sure producers. Golden-rod usually begins to bloom by Sept. 1st, the asters by Sept. 15th, and asters continue until killed by the frosts of fall.

It will be seen that if a favorable season, we have almost an unbroken honey-flow from the blooming of the willows, early in March, until frost does its deadly work in the fall.

As to the quality of honey produced from the different trees and plants, poplar honey among the people here stands first. It is darker than either basswood or sourwood, but its flavor is relished by those who have it, and they hold it in high esteem. Basswood and sourwood come next in quality, and golden-rod and asters last. In some localities the honey from golden-rod and asters constitutes a large per cent. of the crop, and in such localities the people speak high in its praise, and sell it for more per pound than they do honey from poplar, basswood or sourwood.

Sneedville, Tenn.

FEEDING SIMPLIFIED—A BIG IMPROVEMENT.

BY DR. C. C. MILLER.

I've been having lots of fun trying different ways of feeding. It seemed that, to do all the feeding I should want to do this year, the percolator I had would make too slow work. Yet, after trying it, and finding how little work it was, I was loth to go back to the old plan of boiling syrup. I might make additional percolators, or a larger percolator; but while I was about it, I thought I might as well try to have a plan by which the percolating would be done on the hives. If I could just carry the dry sugar to a hive, also the water, it would save a good deal of work, as well as

annoyance from robbers. Especially would this be desirable with the out-apiaries, for only the sugar would have to be taken there, the water being readily at hand.

Another point of advantage would be, that, to each colony, I could more easily give just the amount I thought desirable; for with syrup it isn't so easy. You may have a measure that is exact; but with the dripping stuff there is likely to be some variation, and there may be some variation in the strength of the syrup. But the dry sugar is uniform in strength, and easily measured to a quarter of a pound. Before trying the thing on any large scale, I tried small quantities; and in this I think I struck on what might be very satisfactory for those who want to practice stimulative feeding.

First, I tried letting the bees directly on the sugar. In England a damp quality of sugar is used, and what is called dry feeding is much practiced. I thought I would vary that by taking granulated sugar and wetting it. I nailed a bottom on a T super, and made an inch hole in the bottom for the bees to come up through. Remember, this was hot weather in August, and it took no baiting to get the bees to come up. In the super I set a saucer, poured granulated sugar into it, then poured on water. The bees promptly went to work at it, worked out all the moisture, and left the geater part as dry sugar. Of course, by pouring on more water more feed would be taken; and I can easily see that, for stimulative feeding, where fresh feed must be given every day, or every other day, here was an excellent plan. Just put into a super prepared as I have mentioned, or into any box on top of the hive, a tin dish containing 5 pounds of sugar. Pour water on, but not enough to have any standing on top. Next day it will be worked dry, and you will put on a little more water. The less water put on, of course the slower the feeding will be. You will see that this stimulative feeding will be simply giving a little water each day.

I tried putting on more water at the first, so as to have it wet enough for the bees to carry it all down without any second filling, but I failed. To have enough water on to dissolve all the sugar, I left the water standing on the top with so little sweet in it that the bees didn't care for it, and with the chance of drowning if they did work on it. Then I thought I would try percolating on the hive.

First, on a small scale. I took a tumbler, filled it half full or more with water, then filled it up with granulated sugar. I laid over the tumbler a piece of flannel large enough to completely cover it, and over this I turned a saucer upside down. Then taking hold of the saucer with one hand, and the tumbler with the other, I quickly reversed the whole business. I put this into the super over the hive that I have already mentioned, and in about 48 hours it was empty. This would also do well for stimulating, and I'm not sure but it would be well to have the tumbler two-thirds full of water before filling up with sugar. No unusual machinery is needed; cups and saucers are always on hand, and any cloth, cotton or woolen, will answer. Several tumblers can be used on a hive at a time, or a fruit-can or other larger vessel can be used, in the case of feeding up for winter.

I tried a jelly-tumbler with a tin cover. The bees couldn't get anything out of it. Then I bent the cover open a trifle at one spot, so the bees could get a very little, and it took about two weeks for them to empty it. So the matter can be gauged for fast or slow feeding.

Then I studied on a plan for something larger. A percolator, like the one I had been using, only larger, could be arranged to operate on the hive; but to have a number of these would make troublesome storing, to say nothing of the expense. Would a percolator work if it were shallow instead of deep? Was it necessary to have a thickness of several inches of cotton for the syrup to percolate through? The working of the tumblers seemed to show that it was not; and, really, all that I could see to be necessary was for the syrup to be allowed to come through slowly, and at the bottom. A little crack in the board would be all right if small enough. It must be at the bottom; for if at the top, only water would come through.

I could easily try the thing with a Miller feeder. I took one of the original pattern, stuffed cotton rags under the board where the syrup passes through, put a mixture of hot rosin and beeswax in the corners so nothing could get through except at the bottom, put it on a hive, poured in sugar, then water, at the rate of five quarts of sugar to four of water, and found it "all my fancy painted it."

Having a goodly number of Miller feeders, I didn't need to get up any other feeder; but with what experience I had had I felt I wanted to make at least one feeder such as I would now make if I had none. I made one a little simpler than either the original Miller feeder, or the one with Warner's improvement, but on the

same principle. The old Miller feeder had two feeding places for the bees, one on each side; the new one has two feeding places in the middle. The percolating feeder has only one feeding place, and that is at one end. This allows, by having the hive tip a trifle, a full supply at the feeding place just as long as any feed is left, and I find one end gives room for the bees, without crowding.

Those who are familiar with the Miller feeder will need no further description. Others may understand it from the diagram (Fig. 1) showing a transverse section of one end of the feeder, the only end where any feeding is done. Take a T super, or a box that will nicely fit over the hive, with a bottom ⅜ inch short, leaving the passageway E for the bees to get up through; ⅜ inch from the end A of the super

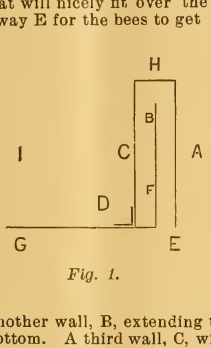


Fig. 1.

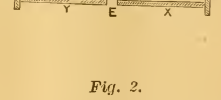


Fig. 2.

put in another wall, B, extending to within ⅜ inch of the cover H, and fitting tight at the bottom. A third wall, C, with a ⅜ space between it and B, comes clear to the top and down to the bottom; but in putting it in, two thicknesses of flannel are put under it, or between it and the bottom G.

When the feeder is put on the hive, the mixture of sugar and water is put into the main compartment; it soaks through the cloth at the point D into the small compartment F, where the bees get it, coming up from the hive through the opening at E.

On the very night after I had finished making this feeder, I had a visit from the junior editor of *Gleanings*. In the morning we went out and put it on a hive. I carried the sugar, and he carried the water and a quart cup. I put in 10 pounds of sugar, and said to him, "Now put in four quarts of water."

"Why not put in five quarts?" said he. "H. R. Boardman has come to the belief that it is better to use equal parts of sugar and water in feeding."

"All right," said I, "Five quarts it is. H. R. Boardman is a pretty solid sort of man to follow. Very likely he is right."

I had thought I was pretty radical to use, for every 5 pounds of sugar, 4 pounds of water instead of two, the orthodox quantity; but it seems to work all right with equal quantities, and, as Doolittle would say, it's more according to nature, for nectar is pretty thin stuff.

I was anxious to have that feeder show off in good shape while Ernest was here; but the bees didn't touch the feed until I baited them in. Then they worked it in good shape, and in about 48 hours it was dry. I wish I had 40 like it. But I'll stuff in rags and make the old Miller feeders do. Marengo, Ill.

The editor of *Gleanings*, in which appeared the above valuable article by Dr. Miller, commented upon it as follows;

In my opinion, Dr. Miller has made what *promises* to be one of the most important improvements, in the way of feeding, that has been made for many a year. Of course, the idea of using dry sugar, and pouring just simply water on it, to make bee-feed, is old. Years and years ago, the senior editor of this journal experimented a good deal, but he did not succeed in attaining satisfactory results. In all his experiments the sweetened water would be taken up by the bees, leaving the dry sugar to stick to the feeder. In order to get the bees to take up all the sugar, it required constant moistening with water. This took so much time and bother that he con-

cluded it was better to pour boiling water on the sugar, and make an actual syrup, the same to be poured into the feeders from a syrup can. But Dr. Miller has taken a long step in advance, in what apparently is a success. That being the case, all he has to do is to carry the dry sugar and a pail of water; pour an equal quantity of each into the feeder, close the hive, and the work is done. You will observe he has simply adapted the percolator idea to the feeder; and herein lies the success of the plan.

We have been trying the plan outlined above by Dr. Miller, and so far we are pleased with it.

Although I saw the plan working successfully at Marengo, on my recent bicycle trip, when I got home one of the first things I asked our apiarist to do was to try this new way of feeding. I was in such a hurry that I could not wait to get common flannel, but asked him to go to the book-binding room and get some common cheese-cloth and poke it under the inside partition of the ordinary Miller feeder, as we make and use it. That you may understand a little better, I herewith show a cross-section (Fig. 2) of the feeder in question. The cloth was crammed in under the boards B, right where the arrows are coming out into the larger compartment; and it was crammed in tight enough so as to make the syrup percolate through it, in order to get into those narrow passage-ways under A on either side. Well, what was the result? "All that my fancy painted it," in the language of Dr. Miller, where the cloth stuffing was properly put in. Where we failed to crowd the cloth in tight enough, some of the water escaped before it had incorporated very much sugar; but in all other cases the bees used up all the sugar syrup.

I forgot to tell you that we put into the feeders equal parts of sugar and water, and, of course, the syrup, as the bees got it, was thinner than they ordinary get it—more like the nectar from the field.

As Mr. Boardman says, this syrup will never granulate, because the bees ripen it; and right here I ought to credit Mr. Boardman with the idea of making the syrup of sugar and water, half and half. The fact that Dr. Miller was leaning the same way, only shows that great minds sometimes run in the same channel.

Without percolation, the water would not have time to take up the sugar suffi ciently before the bees would have it taken down into the brood-nest. Well, when there is not enough water to take up the sugar, the latter simply dries, because the bees will take away the former in very short order. The cloth seems to prevent the water from escaping before it has had time to take up all the sugar; now, then, by putting in an excessive amount of water—that is, perhaps twice as much as is necessary for actual saturation, the sugar is more apt to dissolve, and, when dissolved, to percolate slowly through the cloth.

Perhaps the majority have not already in use the Miller feeder. Well, as Dr. Miller intimates above, you can secure the results by the use of a tumbler, a piece of cloth, and a saucer. But suppose you desire to feed faster, you have plenty of upper stories that you can put on the hives. The same plan, perhaps, can be secured by using a gallon crock inverted over a piece of flannel, the whole set on a plate or large tin pan.

LATER.—Since writing the foregoing, we have tried three one-gallon crock feeders, inverted over several thicknesses of cheese-cloth on plates. So far as I can judge, the experiment seems to be a success; but instead of using flannel we used on one plate four thicknesses of cheese-cloth; on another six, and on another eight. The last mentioned seems to give the best results. In each crock was, of course, put an equal quantity of sugar and water by measure; and in 48 hours, when they were examined, the syrup was all taken out of two of them, and in the third a little yet remained. In what is regularly the bottom of the crocks, was a slight residue of sugar still clinging. The water had probably settled away from it. This would make no trouble, because the crocks can be used on other colonies, or the same one if more feed is required, putting in more sugar and water as before. The slight residue of sugar still in the crock would make no trouble with a fresh supply. I hope others will try this experiment, and report results. In the meantime we shall continue the experiments on a larger scale.

This plan of feeding by percolator feeders is a little slower—that is, it takes the bees about twice as long to get the same amount of feed as by the old plan, when syrup is given to them; but this is rather an advantage; the syrup, being thinner in the first place, is taken down more slowly, and will be ripened better.

ERNEST R. ROOT.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Report for the Season.

My honey crop this year was 2,800 pounds from 43 colonies, spring count.

H. E. Ballou.

Ellicottville, N. Y., Sept. 20.

Bees in Good Condition.

We had a fine prospect for a big fall flow of honey, but it lasted only ten days. My bees are in fine condition for winter. There is a fine prospect for white clover in 1895. Clover is coming up nicely this fall. Some clover is in bloom now. We are having a fine rain this morning. We had good crops of wheat and oats. The corn crop is fair—it will yield from 45 to 50 bushels per acre. Irish potatoes are about half a crop, but sweet potatoes are good. We have about half a crop of apples. The hog crop is rather short, with cholera raging.

C. V. Mann.

Riverton, Ill., Sept. 22.

Splendid Season for Bees.

We have had a splendid season for the bees. The horse-mint was better than for years, commencing to bloom about May 1st and lasting till the middle of July, which gave surplus of about 60 pounds to the colony. We are having nice rains, which give us a good fall crop. Honey is coming in very fast now, from cotton blossoms. My bees are all blacks but two colonies. I purchased three five-banded queens this fall, and lost one in introducing; the other two are doing nicely. The beautiful golden bees are making their appearance in large numbers.

Although times are hard, give us the Bee Journal, for I could not well do without it.

Jas. W. Hodges.

Rockdale, Tex. Sept. 12.

Bees Didn't Do Well.

Bees did not do well this season. They wintered well last winter, and the first of May were very strong, then cold weather set in so they stopped breeding, and on May 25th they had scarcely any brood and were some weaker. It took till June 20th till they got strong again, then dry weather began, and it did not rain any more till Sept. 3rd, when we had enough. My honey crop is small, as I did not get more than 20 pounds per colony. It was basswood honey. No bees did any better in an area of 20 miles around, while some have no honey for table use.

Bees did not swarm much, and those that did swarm are worth but little. Old colonies are in poor condition to winter. I have 112 colonies, and I think I shall unite some this fall, or I will have to feed them, as there is nothing to do now but try to rob each other.

M. J. Kistler.

Collingwood, Ind., Sept. 17.

A Fine Honey Exhibit in Minnesota.

The Minnesota State Fair closed Saturday, Sept. 15th. It was a good one, and one of the finest exhibits (so said one of the Fair Association), was the Minnesota honey exhibit. We have as good honey as any State in the Union, but the fine, large exhibit was largely due to the never tiring work of our worthy Superintendent—Mr. J. P. West.

H. G. Acklin.

St. Paul, Minn., Sept. 18.

Queer Way to Get Surplus.

I have visited a great many bee-keepers in this State the past summer. Down in Goodhue county I met a farmer that kept bees. A friend of mine introduced me to him as a bee-keeper, and the farmer asked me how much I would charge to look at his bees. I told him I would not charge anything to look them over. The next morning I went there at 7 o'clock, and looked at his bees. He had about 14 colonies, using mostly the Langstroth hives with those deep, heavy covers. The first hive I came to I took the cover off, and was surprised—it was so heavy. All the bees were in the cover, and none in the brood-chamber, only those that went through, as there was no cloth or board on top of the brood-frames.

I went to the others, and found all were the same. "My friend," I said,

"here is lots of work to do." "I believe so," he replied. I asked him if I should put them in good condition, would he give me a colony for my work. "Yes, sir," he said, "you can take any one you please." And then I commenced the operations.

I transferred the combs from the covers to the movable-frame hives. In other colonies I cut all out in the covers —the old colonies I mean. You ought to have seen what honey he got. He had washboilers, dishpans and milkpails full. I asked the lady of the house if I should help her take care of the honey. "Oh no," she said, "I understand how to do that," and she cut up the comb in small pieces, and laid it down in stone jars, one piece on top of another, until the jar was full, and then she put cloth over it, and took them to the cellar. I told her to strain the honey, and then she said she wanted comb honey, and she would keep it in the cellar to have it fresh.

I advised the gentleman to subscribe for some bee-papers, and buy some bee-books. Then he went to his library and showed me the "A B C of Bee-Culture," and sample copies of *Gleanings* and other papers. I told him he had all the information he needed. I had to answer so many questions that I was really tired, but at the same time I had lots of fun.

When all the work was done I received a good colony of bees for my work, and then I said good-bye, about 5 o'clock in the evening.

JOHN A. HOLMBERG.

St. Paul, Minn., Sept. 1.

Had a Fair Crop of Honey.

It was very dry here the past summer, but I got a fair crop of honey—over 60 pounds per colony, spring count, and all comb honey, mostly in one-pound sections. I increased about 30 per cent., and they all have plenty of stores for winter. I am well pleased with the AMERICAN BEE JOURNAL. It is worth many times its cost to any person that keeps kees. C. MONETTE.

Chatfield, Minn., Sept 26.

Harvesting and Swarming, Etc.

In reading the BEE JOURNAL of Sept. 6th, I find that Dr. Miller rather mistakes the meaning in my article on page 242.

When I compared harvesting and swarming I meant to infer that harvesting included more than it really does, perhaps; that is, the result of causes until the time of harvesting, and by swarming the result of preceding tendencies. I believe that swarming measures the quantity of honey more than any other part of bee-culture. I believe that in a good honey-flow, with my method, I can get more honey from a colony allowed to swarm (making two swarms—a young one and an old one), than can any person with any method which prevents natural swarming. Am I right, Dr. Miller? That was the idea before.

I am interested in an apiary of 240 colonies, and I am satisfied that the above is true from experience.

But in regard to the amount of honey a colony will consume, I cannot tell except from observation. The amount of honey they consume in winter is easily known, but for the amount in honey-gathering I don't believe any one can possibly know, except by comparison. Mr. Doolittle guessed too high for my ideas, yet he may know exactly.

Onondaga Co., N. Y. S. C. MARKON.

Lard for Removing Propolis.

I saw in the last BEE JOURNAL a recipe for washing propolis off the hands. Change that for this, to prevent propolis sticking to the fingers, which is vastly better: Keep along with the tools a small box with lard in it, and grease the inside of the thumb and fingers occasionally when handling the frames, and propolis will not stick either to the fingers or smoker, which will get greased by the fingers in holding it. Mr. Root, to whom I sent the idea, wrote about using vaseline. That may do, but it suggests an extra expense, which I believe entirely unnecessary. I consider the use of lard most important for comfort in handling frames.

Utica, Ill. ALFRED MOTTAZ.

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

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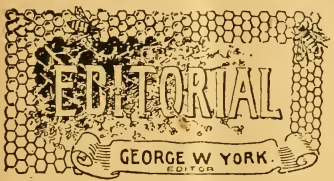


A Convention Rhyme has come to us just in time for the North American meeting this week. Here it is:

Another year has passed away
Since we each other met—
A year of changes to us all—
But we are happy yet.

Though many friends have Homeward gone,
Have ceased this earthly strife—
Still we rejoice that we are blest
With health and peaceful life.

O may the future ever hold
For all abundant store;
And may we often meet again—
At last, to part no more!

The Progressive Bee-Keeper will "fill out the unexpired subscriptions of *Success in Bee-Culture*," which expired recently, as it proved to be a "success" only in name.

Grimshaw's "Apifuge," which is still used in England to prevent stings and bites of insects, doesn't suit the Canadians very well. Bro. Holtermann says that "careful manipulation, a good strain of bees, straight combs, and properly made hives, will do much to prevent stings from bees."

Father Langstroth was visited recently by Bro. A. I. Root, who "was rejoiced to find him feeling so well." Bro. Root says that Mrs. Cowan—Father L.'s daughter—with whom he lives, "has a beautiful family of seven children—four boys and three girls." Also, that "the father of this little flock was called away some two years ago, and now the charge—at least the greater part of it—of looking after the seven children and the aged father, falls on Mrs. Cowan;" and that he "never saw a more beautiful household." Surely, all who read this will be delighted to hear these good things about Mrs. Cowan and Father Langstroth.

"Bee-keeping in Ontario, and Its Development," was clearly explained and fully illustrated in the Toronto, Ont., *Globe* recently. We are inclined to think that Editor Holtermann had a hand in it all, and we don't blame him a bit, for it's well done, and should help to advertise the bee-business wonderfully in Canada. If more of such work were done, we believe it would aid greatly in creating a more general demand for honey.

Why Not Do It?—Brother Leahy of the *Progressive Bee-Keeper*, suggests that those who are so fortunate as to possess "Heaven's best blessing"—a wife—bring them along to the convention at St. Joseph this week. Certainly, it's just the thing to do, if you possibly can arrange it. We haven't forgotten the splendid attendance of comely women at the Columbian meeting, and should be pleased to see as many, or more, at St. Joseph.

Here's a Good One.—In an essay read before a certain Farmers' Institute not 500 miles from Chicago, were these words:

As Rev. E. T. Abbott, of England, has it, "Apis is Latin for bee, and an apiary is where bees, and not apes, are kept."

We have thought for some time that Rev. E. T. Abbott was the present President of the North American Bee-Keepers' Association; and also that he lives in St. Joseph, Mo., not in England! The "ape-y" part of the quotation sounds more natural, but you can't prove it by us. May be he did say it.

The St. Joseph Convention will be in session while most of our readers are perusing these pages. Next week we hope to be able to tell something about the meeting, that may interest those who were unable to attend. Then the following week we expect to begin publishing the proceedings in full, as we have employed an expert to report the convention specially for the AMERICAN BEE JOURNAL. W. Z. Hutchinson is the man who will "take down" the "doings" in a short-hand way, and then, after the convention is over, write it all out so the rest of us can read it in the BEE JOURNAL.

You May Be Surprised to receive this number of the AMERICAN BEE JOURNAL earlier than usual, but it is on account of our going to St. Joseph, Mo., this week to attend the North American bee-convention. If your next week's copy of the BEE JOURNAL is late, you will have to blame that same convention for it. It has required some hard work for us to arrange matters in our office so as to get away for nearly a whole week, but we have succeeded in doing it, and now expect to have a delightful time with the members of the North American at the St. Joseph meeting. All our correspondence will have to be neglected for about a week, when we expect to be again at the "old stand," and with our accustomed promptness.

Rev. Wm. F. Clarke, of Guelph, Ont., Canada, called on us last week. He was visiting friends and relatives in Chicago. Most of our readers know that Mr. Clarke, over 20 years ago, was editor of the AMERICAN BEE JOURNAL, having removed it from Washington, D. C., to Chicago, where it has been published ever since. In 1873 he sold his interest to Mr. Thomas G. Newman, who edited and published it until June 1, 1892, when the present proprietors assumed full control of the destinies of the old AMERICAN BEE JOURNAL. Mr. Newman's financial interest in it ceased when it passed into our hands, though we find that the mistaken idea is still abroad, that he is yet closely connected with its management.

Mr. Newman continued in the bee-supply business in Chicago, and publishes the monthly *Illustrated Home Journal*. He is also the General Manager of the National Bee-Keepers' Union, which has done so much in defending bee-keepers against unjust and malicious persecution.

Twenty-One Tons of Honey.—Mr. Thos. B. Blair, of Neenah, Wis., sent us the following item that he had clipped from a local newspaper, and whose truthfulness he was inclined to doubt:

Mrs. W. J. Pickard, of Richland Centre, Wis., shipped to New York a carload of honey weighing 36,000 pounds. Her entire product this year was 42,000 pounds, which amount was procured in 21 days, making an average of two tons a day.

Wishing, before publishing the item, to be assured that it was something near the truth, we wrote Mrs. Pickard herself, and here is her reply, which came promptly:

RICHLAND CTR., Wis., Oct. 1, 1894.
GEORGE W. YORK & Co., Chicago, Ill.

Dear Sirs:—This clipping is worded almost exactly as I gave it to our home editor, and there need be no doubt about the truthfulness of the statement. Although this is a large amount of honey, it is nevertheless the truth. Yours respectfully,
MRS. W. J. PICKARD.

P. S.—There is one statement which might be corrected, and that is, it ought to be 2,000 pounds instead of two tons per day. MRS. W. J. P.

Certainly the words "Well done," can aptly be addressed to Mrs. Pickard, for her crop of honey is indeed something glorious in this year of drouth and unfavorable results in the majority of the apiaries of our land.

It would be interesting to know the number of colonies Mrs. Pickard had, and anything else about the matter that she may be good enough to tell us all.

Rev. E. T. Abbott and Mr. O. L. Hershiser, President and Vice-President of the North American Bee-Keepers' Association the past year, we take the pleasure in

PRESIDENT ABBOTT.

showing by portraits on this page. *Gleanings* for Oct. 1st also contained a picture of Mr. Abbott, but as we had decided, before seeing *Gleanings*, to insert these two portraits this week, we have done so even at the risk of being thought to follow too closely in the footsteps of our worthy contemporary.

We presumed that *our* picture of Mr. Abbott was exactly as it should be, until we saw the one in *Gleanings*, which shows him slightly bearded. Not having seen him for a whole year, we are unable just now (Oct. 4th) to tell you which portrait is "up to date," but after the convention we will be qualified to speak intelligently upon this important (?) subject. At the risk of disagreeing with Bro. A.'s good wife, however, we will say that we think he's more handsome with simply a mustache—as shown in the picture herewith.

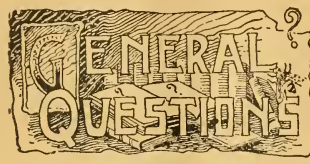
Rendering Beeswax.—B. Taylor, in the *Farm, Stock and Home*, says that he had some old brood-comb that had remained in a tank of water for some weeks, and upon squeezing a handful of it lately, found the wax separated from the black comb easily. On testing some of it in the solar wax extractor he found that it yielded more than double the wax of comb not so treated. The comb seemed to have rotted, leaving the wax free. The easy and thorough rendering of wax is an important subject, and we hope others will investigate the matter and report their experience.

Nurse-Bees Eating Eggs.—Mr. S. E. Miller, in the *Progressive Bee-Keeper*, says that he "has noticed some things that seem to indicate that nurse-bees eat eggs when rearing queens." He isn't *sure* about it, and would like to know whether any other observing bee-keeper has noticed anything of the kind.

Pollen as a Ferment.—We read that pollen is used by the French as a ferment for hydromel. Then some one asked, "Why doesn't some enterprising Yankee start the manufacture of yeast from pol-

VICE-PRES. HERSHISER.

len!" We'll guarantee that if it can be clearly shown that "there's millions in it," there will be plenty Yankees who would soon go into the pollen-yeast business.



ANSWERED BY

DR. C. C. MILLER,
MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Uniting Colonies for Winter.

What is the best method of uniting colonies for the purpose of reducing the number for winter? J. P. S.
Sunapee, N. H.

ANSWER.—You will find a good deal about this in the last few numbers of this journal. When bees are gathering honey there seems no trouble about uniting, but when forage is scarce there is more inclination to fighting. I think you will like the plan of putting one hive over the other with only room for a bee or two at a time to pass from one to the other.

Protection for Winter—Transferring.

1. Will a three-inch plank hive with tarred paper and rough boards tacked on the outside, six-inch super packed with chaff, and double bottom-boards with tarred paper between, be sufficient protection for outdoor wintering, where the mercury frequently hangs 30° to 40° below zero, and sometimes goes to 60° below, on a snap? If so, how wide should a ⅜-inch entrance be left?

2. Would it do to transfer bees on frames from board hives to plank hives (inside dimensions are the same) as late as the forepart of October, if we have a few warm days? M. N. B.
Sand Creek, Wis.

ANSWERS. — 1. Your arrangements seem pretty good, only I don't believe you will like 3-inch plank for hives. It will add greatly to the weight as also to the expense, with no corresponding gain. ⅞ lumber seems to be pretty well agreed on for all climates.

In a place where the temperature is fool enough to lower itself as much as 60° below, it hardly seems as if it would be safe to winter bees outside of a cellar, and it would be certainly well to try part in a cellar. Still, you can't always go by the thermometer. My bees are worse off out-doors with the thermometer 10° below and such fierce winds all day long as we sometimes have, than they would be in a much colder place with no wind stirring.

After all, there's nothing like experience in the matter of wintering bees. Cut and try. When you find a plan that succeeds best for you, that's the plan for you to stick to.

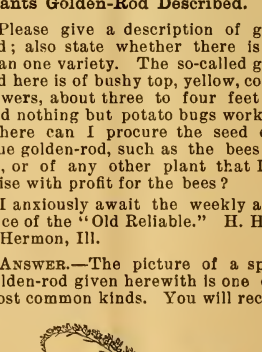
2. There will be no danger in changing the frames from one hive to another any day when warm enough so bees are flying. But look out that you don't get started so late in the day that the bees can't keep on the move for some little time after the change is made.

Wants Golden-Rod Described.

Please give a description of golden-rod; also state whether there is more than one variety. The so-called golden-rod here is of bushy top, yellow, compact flowers, about three to four feet high, and nothing but potato bugs work on it. Where can I procure the seed of the true golden-rod, such as the bees work on, or of any other plant that I could raise with profit for the bees?

I anxiously await the weekly appearance of the "Old Reliable." H. H. H.
Hermon, Ill.

ANSWER.—The picture of a spray of golden-rod given herewith is one of the most common kinds. You will recognize



it from this picture better than from any description. Yet this is only one kind, and there are about 40 different kinds in the U. S. They vary from the widely-branching spray form to the solidly compact head. At this time of year

when you see a plant from one to four feet high, with very bright yellow flowers in clusters, you are pretty safe to guess it may be golden-rod. I suspect the kind you have is the genuine article. There is great diversity as to the matter of bees working on it. Some say it is a valuable honey-plant; others say it is not visited by the bees. In my locality I often find bees on it, but oftener not. I don't think I ever saw the Colorado potato beetle on it, but often the bluish beetle.

Supply dealers may furnish seed, but I doubt if you will find any golden-rod better than what you already have. If you have ground to fill with golden-rod, I advise you to try sweet clover.

Questions on Queens and Drones.

This is my first year with bees. I have 17 colonies. I bought 7 Italian queens from a Texas breeder, and introduced them Aug. 8th. On examination Aug. 19th, I found them all received and laying. I had removed and killed a black queen from each of the 7 colonies previous to introducing the Italian queens, which were 5 untested and 2 tested. On examination Aug. 22nd I found that the tested queens were missing, and one of them had queen-cells started; the other one none.

Four days after this I took a queen-cell from the one and engrafted it into the other. The day for the queens to hatch I found the one where the cells were reared was hatched, and the one engrafted destroyed, finding the comb filled with eggs. On close examination I found a black queen. I know that the Italian queen was laying when she was in there, for there is her brood to show for itself.

I have also exchanged Italian brood into some of my black colonies, after killing the queens, and they had sealed queen-cells in four days after I put it in there. Now from reading bee-books it seems that it takes the eggs three days to hatch and eight days to be sealed; also that they cannot rear a queen from an egg that had been layed more than three days when I exchanged the comb, and the four days after that would be seven days in sealing. I am young in the business, and would be glad to receive all the information I can get, so I will proceed to a few questions:

1. Will a colony receive a queen when it has one?

2. Why were my tested queens killed, and the untested ones not?

3. Are drones of any account, that are reared in worker-cells, as that is all I have in my apiary?

4. Will the bees seal a queen-cell under eight days? L. C. B.

Ivanhoe, Tex., Sept. 8.

ANSWERS.—1. I think not.

2. I don't know of any reason why the bees should discriminate, unless the tested queens had received treatment different from the others before introduction.

3. Opinions differ. I'd rather have full-sized ones. But I will venture the opinion that for once in your life you're mistaken as to having no drones. I think some one would have a paying job if you would give him a dollar apiece for every full-sized drone found in your apiary.

4. According to the books, I believe, the cell should be sealed about eight days after the egg is laid. I have some thought that there may be exceptions to this, from the small size of grubs I have sometimes found in sealed queen-cells.

If you will look again I think you will find that the books teach that bees do not usually rear a queen from a larva more than three days old—although in a strait they may do so—and not as you put it, "that they cannot rear a queen out of an egg that has been laid more than three days." They can rear a queen from a larva that is three days old, that is, three days after hatching from the egg, or six days after the laying of the egg. Now if they chose a larva three days old, or one whose egg had been laid six days, and you found the cell sealed four days later, that would be ten days from the laying of the egg; so there was nothing in the case to differ from the teaching of the books.

Mr. E. K. Terry, of Burlingame, Kans., President of a Kansas bee-association, called at our office on Sept. 29th. He was visiting a son who is a dentist in Chicago. Mr. Terry expected to attend the St. Joseph convention.

☞ "The BEE JOURNAL is the best bee-paper, all around, that I ever saw. I have kept bees for 33 years, and would feel lost without them."—Dr. A. Puderbaugh, of Kansas, on Sept. 25, 1894.

☞ The valuable and interesting AMERICAN BEE JOURNAL is a welcome guest at my desk. Best wishes for its success."—W. A. Choate, of California, Sept. 16, 1894.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Asthma—Prevention and Treatment.

If I had an enemy, and I cordially hated him, I would, notwithstanding, pray for his deliverance from asthma! Only those who have suffered it—or have seen great suffering from it, as I have, can form any idea of its terrible character. Suddenly the sufferer is awakened out of comparative slumber, with a sense of suffocation, as if one's throat was grasped by a powerful hand, and the grip so tightened as to exclude respiration.

A feeling of oppression in the chest possesses him, his lips are blue, face an ashy color, eyes protruding, and every gasp is one of determined effort to obtain air—air to keep from choking to death!

If only the lungs would loosen, if that tight feeling under his breast-bone would relax! O if he could only expectorate, then, ah, *then* he would feel blissfully relieved! But there is the difficulty. Neither of these greatly desired results will take place unless, in some way, the troubles that occasion these symptoms are removed—at least temporarily. And what will the sufferer not do to obtain this surcease from so horrible oppression?

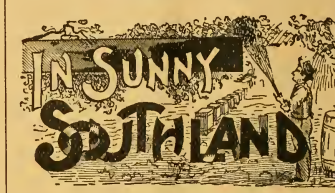
But before any treatment is considered, certain facts should be stated with a view to the prevention of these attacks.

He who knows himself a victim to this trying condition, termed Asthma, should remember how much depends upon himself for immunity from it. His diet at evening should be light. If experience has taught him that certain food is conducive to an attack, he should, of course, abstain from its use. He should wear light or heavy flannels, according to the seasons, to avoid the evil results of sudden changes in temperature. He had best keep out of the cold, damp night air; if compelled to be in it, he should protect himself by adequate clothing.

The treatment must be largely preventive. With this end in view, the brisk friction over the chest and back, night and morning, with a towel wrung out of cold water is excellent; but it must be rubbed hard, and the skin made red. If an attack is feared, a few drops of spirits of camphor dropped on a piece of sugar and taken, is likely to prevent serious trouble.

Or, if you have the remedies at hand, contained in the Family Medicine Case, advertised in the BEE JOURNAL, take the remedies there directed for Asthma, and good results will follow. If the feet are placed in hot water, with a handful of salt added, all the better.

But from abundant observation, I know of nothing so effective, not only as a preventive, but oftentimes a positive cure, as the inhalation of oxygen, prepared by the American Oxygen Co., of Chicago. Children and young people are often cured of asthma, and it is at these tender ages that greatest success attends proper treatment. At more mature time of life relief, more or less permanent, only can reasonably be expected.



CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 11.

(Continued from page 334.)

HOW TO PREVENT SWARMING.

Now after I tell you how to keep your bees from swarming, and you think it is too much trouble, why then let them swarm. If you do not desire any more bees, or any more colonies, and you are bent on keeping down swarming at all hazards, cage your queens and let them remain caged in their hives until the brood all hatches out. Keep down *all* the cells for eight or ten days, or until they have no chance to start any more, and if you are determined to stop the swarming, you *must* not overlook a *single* cell. Then, when the brood is all hatched, turn loose the queens, and I will *guarantee* that your bees will not swarm naturally any more until they get sealed brood, and by that time your honey-flow or the swarming-fever will likely be over. But if they show signs of swarming, starting queen-cells, then cage again, and I will go you a nickle that they will be so reduced by the time you get through the second round that they will be content to stay at the old home for the rest of the season.

Now, this I know is a heap of trouble, but I give it as a remedy to prevent bees from swarming, and it will surely do it, for I have tried it, and when you put out a long grin, and doubt my remedy,

try it and be convinced. If you do not think I can walk into an apiary of 100 colonies, and in less than three days' work knock the swarming business in the head, give me a chance and I will convince you, unless I happen to miss some cells like you are apt to do. But that must come under the head of an exception, and not a rule.

Here is another good remedy. But first I will say where there is trouble there *must* of necessity be a cause, then remove the cause and a cure is easily affected. Well, the cause of swarming is sealed brood, sealed queen-cells, and sealed drone-cells. Now keep the *sealed* brood away until the swarming-fever is over, and no swarming will take place.

I wish you to understand that bees do not swarm naturally with unsealed brood, so the main *cause* of swarming is an abundance of sealed worker-brood, sealed drone-brood, and of course when this is the case they are in a prosperous condition, or they would not have the hive full of sealed brood. Then this is the cause—remove it, and a cure is effected.

You are heard to ask, "What will I do with that sealed brood?" Well, in large apiaries I have always found some weak colonies that can be built up and made equal in bees to the balance, and made ready for the honey-flow, but if such is not the case, put your sealed brood off into empty hives, protect from ants and sun, and leaving a few bees to care for it, is best. Do not let them rear a queen, and when the bees have all hatched out, take them and the empty combs they occupy, and put back with the old queen and old hive where they came from, removing all the brood as before. Put on the sections, get a crop of honey before they get another hive full of sealed brood, and let the bees know that you can beat them at their own game, and don't be one bit afraid of their swarming until they get a lot of sealed brood, for they won't do it if there are two bushels of them.

Now you may say all this is a heap of work and bother, which I will admit that it is, and I love to see my bees swarm too well to practice it much, but it is a remedy for swarming, just the same, and when I am determined to prevent a colony from swarming, I can do so by the above plans.

I have kept down swarming by keeping all the queen-cells torn down, by going through the hives once a week until the swarming season was over. I know that it has been reported that bees do sometimes swarm without having queen-cells started at all, but it must be exceptions and not a rule when they do so. I never had a natural swarm to issue in all my 20 years of bee-keeping, without starting cells first, and seldom until one or more queen-cells were sealed; but I have a few times had swarms issue before any queen-cells were sealed. I am of the opinion that those who reported swarms without any queen-cells started at all, were not natural swarms, as I have *often* had pretty fair colonies swarm out on account of starvation and other causes, and also there would be a few young bees left in the hives, but they were only what we term "pauper swarms." It may be that Italian bees sometimes swarm without making any preparations, but it has never come under my observation.

BEST PLAN OF INCREASE.

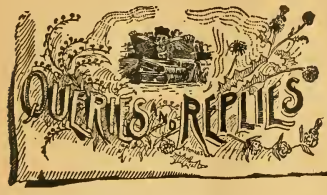
To close this swarming question, I will add that unless you have *all* the bees you can possibly handle and care for, I would allow them to swarm one time each, or divide them artificially, which means about the same thing in the South; for if you take away the largest part of the brood with the new colony, leaving the old queen on the old stand, and give empty frames, or frames of comb foundation, if done just at the proper time, it is as near natural swarming as anything I know of, and the proper time is just at the time they begin to prepare for natural swarming by starting queen-cells. I do not wish to be understood that the starting of what we call "stubs" of queen-cells in nooks and corners, etc., but when the cells have eggs in them, and the bees commence to build them out. Then take the brood, queen-cells, and all to a new stand, leave the old queen a frame or two of unsealed brood, and shake off some young bees on the old stand. The bees will then take care of and finish up those natural cells, and you have natural queens, and just as good as natural swarming. Of course only allow one cell to remain in the new colony, lest they cast a swarm—leave a nice large one. This is really my best plan of increase, as I have stated before, and one that will likely give satisfaction.

The next lesson will be different races of bees, queens, etc.

JENNIE ATCHLEY.

(To be continued.)

Have You Read the wonderful Premium offers on page 451?



Which Orders the Swarming?

Query 944.—When a colony swarms, which orders the "walk-out"—the queen or the workers?—Florida.

The workers.—J. H. LARRABEE.

The workers, no doubt.—R. L. TAYLOR.

Both. They work in unison.—P. H. ELWOOD.

I don't know. The workers, I think. —J. A. GREEN.

In prime swarms, the workers.—EUGENE SECOR.

Both, in harmony with Nature's laws. —G. M. DOOLITTLE.

Workers are "boss," and control the queen.—MRS. L. HARRISON.

The queen—for want of room to deposit her eggs.—E. FRANCE.

I doubt if there is any ordering about it. No order is needed. The queen is late in going.—A. J. COOK.

The workers, many of them, will be in the air before the queen makes her appearance.—S. I. FREEBORN.

It must be the queen that leads—not orders—for the simple fact that if she leads back, they go.—JAS. A. STONE.

Nature; but it seems there is occasionally internal dissensions, as the queen fails to go.—J. M. HAMBAUGH.

It would *seem*—the workers. But no doubt the "walk out" is ordered by "*Nature's first law.*"—J. P. H. BROWN.

I suppose a little like it was in the late great railroad strike. The chief boss (queen) sort of "requests" the swarm to march forth.—C. H. DIBBERN.

We think they are unanimous on that point. The queen is angry because young queens are reared, and the bees are uncomfortable for want of room.—DADANT & SON.

Neither of them. The economy of a bee-hive is not managed on the Debs plan. Each one has a mind to work the best she knows how, and when the time comes for doing a thing, they all do it without any ordering. The workers generally go out first, however.—EMERSON T. ABBOTT.

Does any one know? I don't; and I don't see how one can ascertain. As a guess, I will say, there is probably a community of interest that governs the matter.—J. E. POND.

The workers. I have repeatedly seen them persecuting the queen and driving her out. When a queen cannot fly, the bees will endeavor to prevent her return to the hive.—M. MAHIN.

"I don't know;" but I think there is usually an understanding between bees and queen. Possibiy the bees create the emergency, and the queen gives the "signal."—W. M. BARNUM.

With a normal first swarm the queen is among the last to leave the hive; while with after-swarms with virgin queens, the queen is about the first one to leave the hive.—MRS. J. N. HEATER.

I suppose both must work together to get things in shape for swarming. I suspect the immediate instigators are the workers, as I have known a swarm to issue with no queen in the hive, having been removed a short time before.——C. C. MILLER.

I never have yet been fortunate enough to hear the orders given, but I have often seen bees make a rush, and I believe Nature has taught the whole business—queen and workers—to move out when the proper time comes. I do not think there are any orders at all, but the bees sometimes seem about half way mad at their queen at swarming-time.—MRS. JENNIE ATCHLEY.

The worker-bees control the whole proceeding. This very season I was watching for the queen at the entrance of a hive where the bees were in the act of swarming, and the queen did not make her appearance until ¾ of the swarm was in the air, and when she did appear, she was being *hustled out by force of arms.* I distinctly saw an ireful worker bite her as she sullenly "vacated." I once had a swarm to issue while I had the hive open, and saw the internal excitement, and I saw the queen make repeated attacks on a sealed queen-cell, but the guards stood firmly, and even used force to drive her away. The old idea that the queen "leads out the swarm," looks romantic, and all that, but it is not according to solid facts.—G. W. DEMAREE.

TO SEPARATOR, OR NOT TO SEPARATOR?

BY G. M. DOOLITTLE.

A correspondent writes, saying: "A party writes me that just as nice comb honey can be secured without separators as can be with their use. Is this so? I am about to prepare for another season this fall, and if separators are not necessary in producing comb honey, I wish to know it in time so I can make my preparations accordingly. Please reply through the AMERICAN BEE JOURNAL, as your answer will doubtless be interesting to others besides myself."

This question of separators or no separators is something which must come up for the decision of each one. None can decide the matter for another. Many have claimed during the past that separators were useless, and wishing not to appear wedded to my fixtures, I have tried dispensing with them in a part of my apiary, and actually found that I could, by taking great precaution, as to the hive being level, the foundation fastened to the sides and top of the sections securely, and by giving just the right amount of room, so that the bees would commence in all at once, get combs built true enough to crate, especially if care was taken in crating, so that the "fat" side of one section was placed next to the "lean" side of the one next to it; but when it came to the glassing of them, that was out of the question. To be sure, most markets do not desire glass on the honey; but as a few do, it makes it very handy to have our honey so we can glass it if we wish.

While, as I said, I had succeeded by using much precaution in getting a fair job done without separators, yet I found that this same precaution cost me more than the separators, and that, unless I used this precaution, the loss by bulged and unevenly filled sections was still greater than the first. So I found that there was nothing gained in trying to dispense with separators, but, on the contrary, such a trial would be very likely to result in a loss, owing to the nicety of the work required.

Again, I found that I must leave the case of sections on the hive until finished, before they were disturbed, for if I added more room, except by way of a full case, on the tiering-up plan, I was sure of getting the combs so badly bulged that I could do nothing with them, save to sell them as "chunk honey." This spoiled one of the best ideas I know of in bee-keeping, namely, the putting on of a small amount of surplus room at first, and gradually increasing it as the bees become strong, until the full capacity of the hive was reached. I am satisfied that this one idea has much to do with successful honey-production. So if I dispensed with separators, I lost quite a share of my success also, and all because some were prophesying and saying that "separators were fast becoming things of the past."

Once more: I could not take my sections off once every week to ten days, as I had formerly done, while the combs had a snowy whiteness, which always gives

honey a good name in market, but I must leave them on the hive until the nice white comb was more or less travel-stained by the bees, for as sure as I took a comb out and put an empty section in its place, the combs in the sections next to it would have their cells so lengthened that they could not be crated at all.

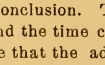
Then each section must be filled with foundation, if I would succeed, no matter how short I was of cash to purchase it. To be sure, I did succeed tolerably well by putting strips of foundation two inches wide in the two outside tiers of sections; then 1½ inches wide in the next two tiers inside of them, then one inch wide next; and in the center two tiers, foundation only ½ inch wide; but all this required a nicety that was much greater than the use of separators demanded.

From the above it will be seen that I have given the non-separator business a fair trial, and was at last driven to the conclusion that, for me, separators are an actual necessity, if I would secure the most comb honey in the best marketable shape.

Not long ago I ran across the question asked in one of the bee-papers of the past, "Will all bee-keepers agree that it is more profitable to dispense with them (separators) than to keep them?" to which one of our noted writers replied: "It is not at all likely that all bee-keepers will, as some are so wedded to their fixtures and methods that it would be almost impossible to induce them to even try some better method;" and yet, if I am correctly informed, that noted writer has left that "better method" (non-separators) and gone back to using separators again. It is well, as a general thing, to know that a certain thing which we may advocate, is a "better method" before we herald it broadcast before the world, for by this heralding we may induce others to go to a great expense in changing their fixtures, only to be disappointed in the end.

Some have thought that separators cost them considerable of their crop of honey; but from careful observations during the past twenty years, I fail to find anything pointing toward such a conclusion. The only thing that I can see against separators is their original cost, and the time consumed in attaching them to the super or wide-frames, and I believe that the advocating of the production of comb honey without their use, is a move in the wrong direction, and I hope that all will take an interest in seeing that good prices in our markets can be maintained only by putting upon it that which is as nearly perfect as possible.

Borodino, N. Y.



THE "NEW BEE-DISEASE" INVESTIGATED.

BY WM. R. HOWARD, M. D.

Having noticed on page 344, in the report of the Los Angeles County convention, by Dr. G. A. Millard, under the caption "A New Bee-Disease," that they are having some trouble in California from this new infection (?), I wish to call the attention of those interested to page 14 (my work on "Foul Brood"), commencing at the last paragraph on the page, where the condition is treated of in full.

We have been troubled with this condition in this county, and have lost several colonies of bees from it. The treatment mentioned in connection with this condition, where rigidly carried out, has not failed to cure it. During the profuse honey-flow it frequently disappears, from the fact that the bees clean out the dead brood and fill the infected cells with honey. Later in the season, or perhaps the next spring, when the honey has been removed, and the cells have been used again for brood, the disease reappears. In all the cases which I have examined, I have found that the most of the dead brood was sealed. Many putrefactive bacteria increase

rapidly when exposed to the air, and when the air is shut out, as by sealing the brood-cells, they are deprived of the oxygen necessary to their growth, and fermentation obtains, thus destroying the sealed pupa.

A familiar illustration is noticed in the souring of milk, or cream; while the cream is exposed to the air, or frequently stirred to admit the oxygen from the atmosphere, souring is hindered. The chemical change is the result of the growth of a microscopic organism of the same origin as yeast, and like common yeast, requires oxygen for its development—this it gathers from the air, if the latter have access; but in the absence of air, as when growing in milk, or in the "yeast batter" of the baker, decomposition of the milk (its sugar) and lactic acid obtains. When the "batter" of the baker is made into dough, the oxygen is excluded, and decomposition takes place, and fermentation is the result, and the bread is said to "rise;" stirring or agitation causes it to "fall."

I mention this familiar illustration so that it may be made plain how fermentation is produced, and to show how this process may be destructive to animal life.

I have had this "new disease" (?) under consideration during the present season, and out of several careful examinations I have not found a single specimen of *bacillus alvei;* I have it still in my laboratory, under culture and investigation, and may arrive at something definite, which may be of interest to bee-keepers. I will give the readers of the AMERICAN BEE JOURNAL the results of my investigations. This is possibly McEvoy's "foul brood" from rotten brood. A careful reading of Proposition II, in my work on "Foul Brood," will give a clear understanding of this disease.

Ft. Worth, Tex.

SOME OF THE PAST SEASON'S "KINKS."

BY F. L. THOMPSON.

WEAK COLONIES AND NUCLEI.—I had a weak colony last spring. By the time the honey-flow came, they had but two frames of brood, and barely enough bees to cover them. I did not want to spread the brood, and so placed a dry comb next to it, and moved the honey-combs back (which had been filled with feed honey by other colonies), thinking that now they would develop. Instead of that, they promptly plugged up every cell of it with new honey. Then I moved that back and put in an empty frame with a starter. This they built out and filled mostly with brood, and subsequent frames in like manner, until they became strong enough to swarm. Query: What would have happened if I had let them alone? Wanted: An article on all the "kinks" in developing nuclei and weak colonies after the flow has begun. Is not a large proportion of an apiary run on the let-alone plan, all weak swarms saved, etc., apt to become honey-bound?

LATE OR EARLY BREEDING.—One ten-frame colony did not begin to breed until after April 1st—I forget just when. In a very short time it had four frames of brood, and when the honey-flow began it had eight, and not long after cast a strong swarm. Bees here usually begin very early, and increase gradually. It is still an unsettled question when breeding should begin. It depends upon locality, of course; but are there not some absolute principles about it? The weight of authority seems to be in favor of late breeding, if the old bees are not too near their end.

ANOINTING FRAME EDGES.—Having a number of new combs to be built this year, I anointed the edges of some 50 closed-end frames with an inferior quality of machine oil. (Not patient enough to wait to get vaseline.) It was a particular job to keep such stuff from spreading too much, and it did not smell very nice. But the

bees did not object (I did not use such frames on swarms), and the frames handled beautifully. There is now a very little propolis along their edges. How would it do to apply vaseline to the board designed for end-bars before it is sawed up?

Swarms—High-Fliers and Low-Fliers.—An old bee-keeper told me that when a swarm on the march is observed to be flying low, it is pretty sure to stop within half a mile or so, while if it flies high there is no use in following it.

Wet Bee-Brush.—He also told me, and I proved by experience, of the advantages of keeping a bee-brush wet when in use. This has been given before in *Gleanings*, but it pays to bring up such matters periodically. A wet brush is more effectual, irritates the bees less, and does not get sticky with honey.

Absconding—Peculiar Case.—The same man once had a peculiar case of an absconding swarm. It was found to be queenless shortly after being hived, and he gave it a frame of brood. It stayed until a number of queen-cells were sealed, when it suddenly left bodily, and went half a mile to a neighbor's yard, clustered on a tree for half an hour, then returned to the hive it had just left, and stayed there.

A Swarming-Time Pole.—When there are tall trees about the apiary, a handy and simple tool in swarming-time is a long, light pole with a hook on the end. With this, light branches can be entirely torn off with a single pull, if it is applied at just the right place; the boughs may be shaken with it to prevent the swarm from clustering again, and spots inaccessible from the ground may be reached from the middle of the tree. But clipped queens are nicer.

An Improved Super.—I have tried several of Aikin Bros. & Knight's supers. For keeping the sections absolutely clean, they are very superior. They are intended to be used in connection with wood-zinc honey-boards. Some of the sections went from the super to the crate untouched by the knife; and none required any but a very little scraping. This super uses separators between every two rows instead of between every one, though more can be used if desired. That seems a good idea. The honey is straight enough to crate; in fact, it rarely bulges too much on the side opposite the separator, when there is but one more comb between it and the next separator; and the sections are nearer full weight.

Who Can Answer?—Why don't we ever hear from the Vermont and Nebraska experiment stations?

Foreign Bee-Papers.—Those who can do so will do well to read the foreign bee-papers, especially *L'Apicoltore*. They may not have many ideas that we can assimilate without digesting first; their methods and hives are different from ours. But they are *suggestive*.

An Experiment.—Here is a desirable experiment: Find the average temperature of the upper *corners* of the comb-spacers in a number of colonies in closed-end frames during a freezing spell in winter, and compare it with the average temperature of the same in the same number of colonies of the same strength on open-end frames at the same time. It will not do to get the temperature of the center of the cluster; for the inside bees of colonies on open-end frames are doubtless just as warm as the inside bees of colonies on closed-end frames; but if there is any difference, the crust of inert bees on the outside of the cluster when closed-end frames are used ought to be less thick than on open-end frames; the vitality of the colony will not be so soon expended, and more brood will be reared in spring.

EXTRACTING AT NIGHT.—Those with a limited amount of extracting to do after the flow, when robbers are plenty and honey thick, need not spend money for a honey-house, or go into the house and daub the floors up. Extract out in the yard at night. A piece of wire-screen over a strong colony, and the extracting chamber cleared of bees, set over it and covered up on the previous morning, will keep the combs warm until wanted. When a set of frames is finished, it can be at once returned to the bees for cleaning up with little disturbance, leaving the tiering, if any, until next day. Extracting by moonlight, with the crickets singing about you, and an occasional croaking of frogs in the distance, is lovely. The honey will be cooled by the sides of the extractor; but if you cover up the receiving vessel and leave it in the yard next day to warm up in the sun, the honey may be strained without difficulty as soon as the bees stop flying. Arvada, Colo.

THE BEST HIVE FOR WINTERING.

BY J. W. PETERSON.

As there seems to be a great deal now being said through the different bee-papers on the subjects of large *vs.* small hives, wintering, etc., I beg leave to briefly say a few words concerning my experience and observation.

I fully agree with Mr. Bender (see September *Nebraska Bee-Keeper*), viz.: that bees winter and spring much better in a deep hive than a shallow one. This is a fact that I think is acknowledged by the majority of our prominent bee-keepers of to-day. I further think that better results can be obtained, take it the year round, with a frame deeper and shorter than the Langstroth, than with any frame as shallow as the Langstroth.

I have used the American hive, and found that my bees came through the winter without loss, and in splendid condition, while those of my neighbors who used the Langstroth hive, wintered poorly, and their loss by spring dwindling was greater than mine. The weather here in the spring is so cold and changeable, that it is really harder on the bees than the winter is, consequently there is a great deal of dwindling. I do not think, however, that this is just to the hive, as the frames are a little too deep for easy handling, also the brood-chamber somewhat deep for producing comb honey, especially in the supers; and I do not like the idea of using any part of the brood-chamber for surplus honey, either comb or extracted.

I think a frame 13¾ inches long by 10 or 10½ deep, about right for an all-purpose hive, at least I shall give it a fair trial. I also notice that some of my friends who have been opposed to a deep frame, are thinking of trying a deeper one than they are now using. I have never had any experience with the Heddon or any hive so shallow as that, but I think with proper management it would be a good hive for comb honey, but not for wintering, unless the frames be tiered up so that it would make a deep hive; and even then, it seems to me, it is longer than would be advisable.

I know some will say that a hive for successful wintering and springing is not all that we are after. We are after the best results in the production of honey (large yields, etc.) But I would like to ask them how they can expect to get the largest yields of honey without having their bees winter and spring in the best possible condition, and be strong and healthy for the commencement of the honey-flow (if there be one).

I favor out-door wintering, every time. It is true, the bees may require a greater supply of stores than when wintered in the cellar, but then I think it gives so much

better satisfaction, that it more than pays for the extra stores consumed. We find a man occasionally who says he winters his bees on the summer stands without any protection—not even a cushion over the frames; but I prefer to winter them on the summer stands with an outside case, packed with chaff, and a chaff cushion over the frames. Bees wintered in this way, having proper care the previous fall, have, in my experience and observation, been no other than satisfactory.

As has already been said, what would be a good practice in one part of the country would not be good in another; and I will further say, that a method successful with one might not be with another.

This subject of hives, in my estimation, is a very important one, as our success largely depends on a good hive; and it behooves us to use the best that can be obtained for the particular locality in which we live; also that we may have our frames of a uniform size, so that there may be no call for altering and fitting frames.

Of course, some who are acquainted with my not very ripe age (as I have but few gray hairs) and short experience, will undoubtedly say: "O he is only a young fellow with but little experience, and his views are not to be compared with older heads in the business!" Or, perhaps some may say, as they have of Ben There, "Young man, that's all right for a tenderfoot." But have we younger members of the craft not a right to express our ideas, as well as the older ones? Some one, however, may convert us to using such hives, and to thinking as they do.

Omaha, Nebr.

ONE-POUND OR TWO-POUND SECTIONS.

BY CHAS. DADANT.

The query was lately in the AMERIAN BEE JOURNAL: "Which colony will store the more surplus honey, the one provided with one-pound sections, or the one having two-pound sections?

The answers to this query were almost unanimously in favor of the two-pound sections, although everybody agreed that when it came to selling the honey, it was much better to have it in one-pound sections.

To the farmer who keeps but a few colonies, and who wishes to produce honey, especially for his private family use, the question of sale is but secondary, and he desires, above all things, to get as much product as possible from the few colonies of bees that he keeps. It is, therefore, important for him to know whether there is really an advantage in using large honey-sections. It is my intention, in this article, to explain why bees prefer large receptacles.

Bees, in a state of nature, lodge themselves in the hollow of trees, principally. They store honey in provision of future needs, especially for food during the cold season. Their instinct leads them to place the honey at the upper part of their hive above the brood, and far from the entrance, so that the cluster of bees being placed between their stores and the entrance, they can better defend these against intruders. They also want the honey in a place easily accessible during cold weather, and therefore as near the brood-nest as possible.

When we give our bees an empty box above their breeding-room, we act according to their requirements, but when the box is cut up into small compartments they readily perceive that some parts of this surplus room may become of difficult access to them during the cold weather, and they work in them much more reluctantly.

The first step taken for the securing of surplus honey, after the invention of the movable-frame hive, was the invention of a small box, glassed on four sides, and holding about four pounds of honey. The bees had access to this small box

through only one hole about an inch in diameter. It was soon perceived that there was less honey harvested in this style of box than formerly in the old wooden bucket plan, laid bottom side up on top of the box-hive.

We used these boxes for a short time, but after the invention of the extractor in 1867, we tried surplus cases of full size with open frames right over the brood-combs, and without any partition or honey-board. These frames were used for extracting. The result was so much in favor of the large frames that we soon discarded the glass boxes altogether.

A little later on, the honey-section, holding about a pound, was invented, and found just the thing for the comb-honey market. We tried these sections, in broad frames to hold them in the supers, and we used them side by side with the long extracting frames. The result was by far in favor of the latter, and were it not that the city trade demands honey in small packages, we dare the assertion that no one would think of using anything else.

To show how evidently the bees prefer a long, open frame to a small section, we will say that we tried both the long frames and the frames containing four sections each, side by side in hives, placing the small sections in the center over the brood-nest. In every instance, the bees filled the large open frames first, although they were placed in a less favorable place. In some instances they even sealed the honey in the open frames on both sides before filling the center sections. In a comparative test between large and small sections, the result was similar, although the difference was not so plainly marked.

This shows without doubt that it is best to use long open frames, or large sections, in the supers, when the intention of the bee-keeper is to produce honey especially or exclusively for his family's use. But, if honey for market is wanted, one must either use the one-pound sections which are the only comb-honey package of marketable value, or he must use the long, open frames with the honey-extractor.—*Prairie Farmer.*

Hamilton, Ill.

VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

Bee-Field Competition.—I'm quite interested in reading Mrs. Atchley's experience in the matter of correspondence. Incidentally a point comes up upon which she is silent, perhaps from modesty, but it would be greater kindness to all to talk right out. She is asked about matters at Beeville, and it is not hard to read between the lines that Mrs. Atchley has in substance said, "Yes, it might be a good thing for you to settle down at Beeville; come and look the ground over for yourself, and I'll help you all I can." That idea, "What one woman has done, another can do," is sometimes quite a "booster," and sometimes it's a bare-faced fraud. No other woman in all the world can do what Mrs. Atchley has done, unless Mrs. Atchley gets out of the way. That is, no one can sit down beside her and have as free a field as Mrs. Atchley now has.

Now if there is twice as much pasturage as Mrs. Atchley's bees can ever be expected to use, then it's all right to encourage others to occupy the ground. But in general it's better to say plainly, "The chance on this field is not as good as it was when I came here, for then it was unoccupied, and now there is no more pasturage than my bees can use, and if more bees are brought, it will not only be just so much taken from my bees, but it will not give your bees so good a chance as if you find an unoccupied field."

I can hardly think of a greater absurdity in the line of selecting a location than

for a man to settle down close beside an established bee-keeper who has one or more out-apiaries. For if there is room for the bees of a new-comer, the man is a fool not to occupy it with his own bees instead of taking them to an out-apiary.

PLANTING FOR HONEY.—The replies on page 399 are not very encouraging to any one who thinks of planting for honey alone. Hope in that direction has, I think, pretty much died out. And there was at one time a good deal of it. I well remember some years ago Prof. Cook's mildly reproachful protest against my saying anything to discourage attempts in that direction, and it is well known that he experimented quite largely. Now his brief reply, "Not any," shows that he has gone over to the majority.

It is true, white clover and alfalfa are each mentioned once as proper to sow for honey alone, but it seems to me there are few places where it would pay to sow white clover and let it stand year after year without cutting or pasturing with any thing but bees.

Four of the repliers show still a lingering belief in sweet clover as a profitable thing to plant for honey alone. In some places, and on some kinds of soils, it may be. But if there is any future for sweet clover—and it is quite possible there may be—it is because of the fact that it is useful aside from its use as a honey-plant. On this account I'm glad to see the article from M. M. Baldridge, page 401.

In addition to what he has said, I think it worth while to mention another point. It is very desirable to cut sweet clover *early*. This for more than one reason. If left until in bloom, or even if only budded for bloom, there will be too large a quantity of coarse, heavy stalks that will not be eaten. Another reason for early cutting is, that after early cutting it will branch out and give a lot of splendid pasturage for the bees after white clover is out of the way. I think it would be better to cut it before it attains its full height, when there is no sign of blossom buds.

Friend Baldridge has had probably more experience with sweet clover than I, yet on one point I'm a little skeptical. He says, "I should prefer to cover the seed by harrowing lightly." One spring I had some covered that way—sowed with oats. It made a good stand, but the following winter killed every plant. I don't know how deep it could be covered without hindering its coming up at all, but if that seed had been covered six inches—providing it had come at all—I don't believe it would have heaved the following winter. Or, if the ground had been hard, the result might have been different. But shallow sowing on mellow ground was certainly a failure that time.

SPREADING OF BROOD.—Dr. Brown's words, on page 401, suggest the idea that it would be well to have a standing rule, "No one should spread brood till he has had a long experience." And after he has had an extended experience he'll not do such a great deal at spreading brood.

A "KINKY" FRAUD.—That man F. L. Thompson, that writes on page 402, is a fraud. Yes, a fraud of the first water. Any man who can handle a subject as he has done, and give it in such style that one reads it with pleasure even if not interested in the topic, and then keeps back from view the "kinks" that are rattling around in his brain—I say a man who thus keeps back his fair share of contributions is defrauding us out of our just rights. But if he's ready to "shell out" in reasonable season, I'll take it all back and apologize* for calling names.

CELLARS AND CISTERNS.—Look here, Dr. Peiro, I'm quite willing to make my cellar blue with burning brimstone, but I just won't build any root-house. I'll

promise you to keep all decaying stuff out of the cellar, and I think I can keep it fit to live over, or even in, and I want pure air in it for my bees. I'm strongly inclined to the belief that bees don't winter so well in cellars as in mild winters out-doors, just because the nasty rotting stuff down cellar makes the air unfit to breathe.

You leave me in rather bad shape in another direction. One of the cisterns to our house has water fit to drink, and the other doesn't smell good, and isn't used. Now if you insist on it, I might burn down the house and build another at some distance—that would give a chance to have a later style of paper on the walls— but then the new cistern in the new place would get to having the same smell, and then another conflagration would be necessary. Now if you'll just tell us how to make that cistern sweet—it was cleaned out only a little while ago—if it's anything within reason, I'll try to take the medicine like a little man. Marengo, Ill.

[*Say, Doctor, don't you think you'd better offer an apology instanter, and with out any "kinks" about it, after reading pages 465 and 466? We believe you ought to, and do it as meekly as you can.—EDITOR.]

SOME PERSONAL BEE-EXPERIENCES.

BY EDWIN BEVINS.

A few years ago the writer thought he would like to have some bees. I had never had anything to do with bees except to shy away from them for fear of getting stung. I had seen other folks have bees—some in sections of hollow logs, and some in box-hives with holes in the top, over which in summer was placed a smaller box or "cap," inside of which was a many-cornered piece of glass covering a circular hole. I had never read any bee-book or bee-papers, but was taking some agricultural papers, some of which had a bee-department. One of the writers for one of these departments said that a beginner should begin with one colony, and increase his colonies with his increase of knowledge and experience.

This writer, or some other, recommended the use of the dovetailed hive; so looking over a stray copy of the AMERICAN BEE JOURNAL, which I happened to have at that time, for the advertisement of the nearest supply dealer, I sent to him, a distance of 200 miles or so, for a dovetailed hive. It came, and had on it something which I afterwards found was called a super, which was filled with something I did not know at the time were called sections. This hive, super, sections and all, I took just before swarming-time to a neighbor, and engaged with him for a dollar to hive an early swarm for me. The swarm I left with this neighbor until fall. When taken home the hive was found to be entirely filled with honey—brood-chamber, sections and all, with lots of bridges and brace-bombs intermixed, though I did not know at that time by what names to call them.

That same fall I came into possession of some more colonies of black bees, which were in log hives. These came through the winter succeeding all right, but my bees in the dovetailed hive died before spring.

I wish here to record my opinion, parenthetically, that the bee-department in the agricultural paper is not altogether indispensable to the modern bee-keeper.

When apple-bloom came, I tried my hand at transferring the bees in the log hives to dovetailed hives, and was reasonably successful. The winter previous I had procured some more dovetailed hives, this time not sending so far for them, but when they came to hand I found to my surprise and disgust that they were not like the first one. In other words, I found that there were dovetailed hives and dovetailed hives. The first had what I found by reference to the catalogues were called

T tins in the supers; the others I found in the same way had pattern slats, and, besides, the first hive was not quite so wide as the others.

I began to question the need and the economy of sending away for hives at all. The dovetailing didn't seem altogether necessary, nor the grooved cleats, nor the ⅞-inch strips between hive and bottom-board. These cleats might be made a little heavier, without any grooves, and nailed to the underside of the bottom-board and cover. The sides and ends of the hive-body might be made ⅜ inch wider, and have an entrance cut in one end, and the hive could just as well stand on a smooth bottom-board as on any intervening strips. Some long, slender wire nails with flat heads would hold the corner together with sufficient firmness; if not, some strips of tin tacked around the corners would assist in holding them tight. I made some hive-bodies, bottoms and covers on this plan, and I am so well pleased with them, and the saving in cost, that my dovetailed hives will henceforth have to get along without any "tails."

Some of the winter leisure which hangs so heavy on the hands of some bee-*writers* can be put in as above indicated.

While I was working along with the dovetailed hive and its possible supplanter, it occurred to me that possibly the bee-department in the agricultural papers was not doing its whole duty; so I bought a copy of Dadant's revision of Langstroth's work on the honey-bee to help it out. This work I read with all the eagerness and interest of a boy who comes in possession of a Waverly novel. But I had not read long until I discovered that the work I had been doing was wrong—all wrong, and altogether wrong. The Dadant idea of bee-keeping seems to be big colonies of Italians in big hives, and extracted honey and—little work. They tell the beginner to begin with these big hives, and assure him that he can produce twice as much of extracted honey as he can of comb honey, and that it will sell for about two-thirds the price of comb honey.

Well, I thought I wanted some of these big hives, and the consequent easy time in hot weather. But where could I get the hives? Dadant did not offer any for sale, and nobody else made any that I knew of, so with the description contained in the book before me, I set to work to make one. I got along nicely until I had one completed—almost—but then my comprehension failed and I had to send to Dadant for a sample hive. Since then I have made several of them, and have the big colonies in some.

But about this time, when I had made up my mind to have more of these big colonies in more of these big hives, and produce lots of extracted honey, and have a good, easy time, the bee-papers began to get numerous about the house, and every paper had something to say about adulteration. Its terrible spectre stood between me and my vision of honey and happiness. I scanned the papers for the market quotations for extracted honey, and they were not encouraging. I would go slow in the matter of increasing the number of those big hives. The Dadants were luring me to my ruin. I would resume the use of some of those little hives, and produce some comb honey. I had only just got settled down to this idea when up sprung that infernal discussion in the bee-papers about sugar-honey. Here I was up another stump! If every other fellow was going to set his bees to making honey out of granulated sugar, what was a fellow to do who let his bees get their honey in the old-fashioned way? The sugar feeding might go on from early spring to early winter, and perhaps the year round, while the nectar-gathering bees had only a few weeks in which to labor! What could they do against such competition? Happily, the handle of this discussion got so hot that the fellows who had the firmest grip of

it had to let go, and the whole thing fell to the ground with a shudder-producing thud.

Dr. Miller, I believe, lately told one of his questioners that it is a matter of course that no honest person will feed sugar syrup to his bees with the design of having it stored in the sections and sold for honey. Well, it is a satisfaction to know that it is sometimes easy for a man to call a spade a spade, though at other times he may find it expedient to write an article of less or greater length in order to avoid saying anything about it.

But to return. When the clamor was all over, and a general hush fell upon the apicultural world, I found myself in possession of some colonies in the little hives, and some in the big ones—and I am not sorry. I shall work that way the rest of my apicultural life. I shall work for honey and some other things connected with the pursuit that have no market value, and let the money part of it take care of itself. Strong colonies of Italians in the home apiary, large enough for the home field, and worked for comb honey and increase of colonies, which apiarists say you are sure to have, and these big natural swarms hived in the big Dadant hives and sent to the out-apiary—why will not work along this line give as good returns with as little labor as any other, to the man who would devote all his time to bee-keeping? To the man who will work along this line unremittingly from year to year, there is much honey, considerable money, and some indiscribable things that are pleasant besides. I appeal to Dr. Miller and to Mr. Doolittle, and to all the old veterans, and to some who are not veterans, to say if there are not many things about this pursuit which they would not sell for cash if they could. Into this inviting field of apiculture I may never enter far. The shadows are falling around me, and with a sigh I surrender to the conviction that I never shall do much of what I love to do so well.

Leon, Iowa.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Best Year He Ever Saw.

I put out my bees on April 18, 1894. I had 7 colonies, spring count, but sold one, which left 6 in good condition. I lost the queen of colony No. 5, and they reared another and did not swarm till August, when I hived them back.

I lost the first swarm of the season, which came out on June 22nd, at the first appearance of white clover. I increased to 13 colonies, and got 50 pounds to the colony—286 pounds of comb honey and 364 of extracted.

Mr. Griffin spoke of Mr. Tarr some time ago. I for one should like to hear from him.

The AMERICAN BEE JOURNAL is a welcome weekly visitor, and I have learned many a good lesson from its columns. May success always attend it.

F. M. POLAND.

Freedom, Me., Sept. 20.

Very Tedious Work.

I have 19 colonies of bees, and no honey to sell this fall. I was well prepared for it, too. It was too dry this summer—no white clover—all burned up. I think it was Solomon who said, "Hope deferred maketh the heart sick." Well, I am not sick yet, but really it is very tedious getting ready year after year, and then be dissapointed.

JOSEPH MASON.

Wallace, Ill., Sept. 4.

Fairly Good Season for Honey.

The season here has been fairly good for the production of honey. A continuous rain during fruit-bloom prevented

the bees getting much honey from that source, and white clover yielded but little surplus, but we had a good ten days' run on basswood—the weather being so hot that it only lasted that length of time—and the buckwheat yielded more than I have known it to do before in many years. The swarming fever was simply immense during the white clover bloom, and made us no little trouble in trying to keep our colonies in such condition as we wanted them for obtaining surplus. Twenty-two colonies, spring count, increased to 35, and gave 2,600 pounds of extracted honey, with abundant stores left for winter.

DAVID HALL.

Warsaw, N. Y., Sept. 24.

A Simple Bee-Feeder.

Of all the feeders that I know of, the Hill bee-feeder is the best for me, but I object to having the feeder so arranged that it gives a chance for the bees to fly up into one's face when refilling. To overcome this I have made a 3x3x½ inch rim over what I would call a bee-excluder. The wood rim is simply covered with screen-wire. I place the bee-excluder over the hole in the honey-board or oil-cloth which covers the brood-frames, and make a Hill feeder out of a pint Mason fruit-jar, by breaking the porcelain bottom out of the cover, then puncture the cover with a scratch-awl, and I have a feeder that is practical, cheap, and with proper care it will last a lifetime.

The feeder is to be placed over the bee-excluder, and the bees have to reach through the excluder to get at the feed, but that does not delay them. I am writing from experience.

AUGUST BARTZ.

Chippewa Falls, Wis.

Finding Their Own Hive-Entrance.

I want to tell Mr. Faylor (see page 313) that the winter problem has never been a problem with me, and his plan so nearly resembles mine that I think I can answer his question.

I always winter my bees successfully out-doors, and think they can be so wintered in any place where it is profitable to keep bees. To give full details would take up too much space. If Mr. F. will begin at the approach of cold weather to move his hives together about six inches each day (provided it is flying weather), until they are close together, facing the south, with the front ½ inch below level, place boards along the back and ends of the rows, to extend about two inches above the brood-chamber, about one inch from the hives, and fill the space with sawdust, chaff, dry leaves or fine shavings; rip off the sealed cover, place over the frames a piece of burlap, put on a super and fill it up to within an inch or two of the cover with sawdust or chaff, protect all from the rain and snow, his bees will find their own homes, and he will have but little loss. I have always from my first experience with bees, followed this plan with entire satisfaction.

I have taken more than 100 pounds of nice comb honey per colony, spring count, from my bees this summer, besides increasing from 55 to 80 colonies, and could have done better had I not tired entirely out; being alone, and 60 years old, I soon tired out.

I don't like Dr. Miller's tree or post to shade the entrance of the hive, and although I admire the man very much, I am afraid to tell him I don't like it.

J. S. SCOTT.

Springville, Utah, Sept. 22.

[We are very certain you need not *fear* to disagree with Dr. Miller. He will think more of you for having spoken out in the plain way you have done. All true men are always open to kindly and well-meaning criticism. Dr. Miller is no exception in that regard.—EDITOR.]

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Nov. 13, 14.—Illinois State, at Springfield, Ill. Jas. A Stone, Sec., Bradfordton, Ill.

1895.

Jan. 28.—Venango Co., at Franklin, Pa. C. S. Pizer, Sec., Franklin, Pa.

Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.

☞ **In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

North American Bee-Keepers' Association

PRES.—Emerson T. Abbott.....St. Joseph, Mo.
VICE-PRES.—O. L. Hershiser....Buffalo, N. Y.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill. 147 South Western Avenue.

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EDITORIAL

GEORGE W YORK, EDITOR

The North American Convention for 1894 is now a matter of history. We were at the meeting in St. Joseph, Mo., last week, and had a most enjoyable and profitable time. President Abbott outdid himself several times over. The next meeting will be held in Toronto, Ont., Canada, and the new officers elected for 1895 are as follows:

President—R. F. Holtermann, of Brantford, Ont., editor of the *Canadian Bee Journal*.

Vice-President—L. D. Stilson, of York, Nebr., editor of the *Nebraska Bee-Keeper*.

Secretary—W. Z. Hutchinson, of Flint, Mich., editor of the *Bee-Keepers' Review*.

Treasurer—John T. Calvert, of Medina, O., Business Manager of *Gleanings in Bee-Culture*.

At this time (Oct. 13th) we have just arrived at our office, and there is not time to give any of the particulars concerning the meeting. Next week we will tell you all something about it, and likely begin the report of the proceedings, which were voted to be published in full in the BEE JOURNAL.

Bro. Geo. W. Brodbeck, of Los Angeles, is one of California's progressive bee-keepers. In a very cordial letter received last week, he says that since his return from Arrowhead Springs, he has disposed of his Arrowhead Apiary, and is at work now building up another, using a shallow, self-spacing frame, with the object of running exclusively for comb honey, securing the early spring flow there in the valley, after which he intends moving them to the mountains in time for the sage honey. The shallow frame is a novelty, and as yet an experiment in California, but Bro. B. is disposed to test it, and if his health permits, he will also carry out the migratory project as well. We wish him every success in his undertakings.

Prof. Frank R. Cheshire, we regret very much to learn, died in England on Sept. 16th, while undergoing an operation for a painful internal malady, from which he suffered for some time. Particulars are promised later. Prof. Cheshire's investigation of foul brood, with the published results, together with his magnificent two volumes on "Bees and Bee-Keeping," made him a prominent figure in apiculture throughout the world. All will revere his name. We learn of his death through the *British Bee Journal*.

Mr. W. M. Barnum, of Denver, Colo., was married recently. We have not learned the particulars. Bro. B. is one of the number who have long been answering questions in our department of "Queries and Replies." All our readers will unite with us in extending to the happy couple heartiest congratulations and sincerest wishes for a long and happy life together.

Illinois Fair Apiarian Exhibit.—The honey show at the Illinois State Fair in September, at Springfield, was quite a success, considering the poor crop. There was a good display of comb and extracted honey, candied honey, beeswax, apiarian implements, etc.

Mr. Kirkpatrick, of Indiana, was present with a fine display of comb and extracted honey, and carried off the blue ribbons on both, as well as the apiarian implements.

Miss Kennedy, of Pasfield, Ill., took 2nd premium on comb honey, and her display was not much behind the first best.

Chas. Becker, of Pleasant Plains, Ill., secured 2nd on extracted honey, and his display was (as was Miss Kennedy's) almost, if not fully, as good as that which took 1st—but not shown to the same advantage.

W. J. Finch, of Springfield, exhibited a very fine lot of beeswax, though others who had arranged for designs in wax, carried off the ribbons. Mr. Finch obtained the blue ribbon on foundation mill in operation.

Mr. Becker took 1st on extractor in operation.

Jas. A. Stone, of Bradfordton, Ill., took 1st on candied honey, and the same on best display of beeswax.

Keeping Combs from Moths.—Mrs. L. Harrison tells how it is done, in the *American Bee-Keeper*, as follows:

A year ago last spring we put a number of hives containing combs into the cellar. In a week's time we looked them over carefully, destroying all grubs. The third time we looked them over we failed to find one, not a moth developed in the cellar, and not one entered, as the windows were covered with wire-cloth. There has not been increase enough to use those combs this summer, and there has not a grub appeared in any of them.

Bee-Keeping in Cuba is very entertainingly written in *Gleanings* by Fred L. Craycraft, of San Jose de las Gajas. (Whew! but isn't that a whopper of a name? It's almost as big as the island of Cuba itself!) Mr. Craycraft's report on July 28, 1894, is summed up in this paragraph:

Beginning in October, 1891, with 16 colonies, all very weak, none of them having over seven combs, I have increased them to 300 colonies, and extracted 58,000 pounds of honey. I might have had more last year, but did not have time to attend to them as I should have done, and had only about 160 colonies ready for the honey-flow, as I had to superintend the work on a 300-acre farm.

Extracted honey brings from 3 to 3½ cents a pound there, inclusive of package. It is gathered principally from the campanilla vine, or bell-flower, which is not affected by drouth, and blooms from November to August. Mr. C. prefers the leather-colored Italian bees, for the reason that his "experience proves them to be superior to the five-banded or golden Italians, for they seem to be harder and stronger, and the queens remain more prolific than the others during cool weather, which is very important here, as the honey-flow comes during the winter months."

According to the writer named, what is needed in Cuba is "practical, experienced men who are not afraid to work." Guess that's what is wanted almost everywhere, isn't it? "Scarcity of Spanish bee-literature" is also mentioned. Now if the people there would only learn to read English, the BEE JOURNAL would be glad to "smile" upon them every week. Mr. Craycraft might perhaps get up a reading class, using the BEE JOURNAL as one of the text-books.

Production and Marketing.—Bro. S. E. Miller, in the September *Progressive Bee-Keeper*, offers the following very sensible ideas on marketing a crop of honey when you have one to dispose of:

Producing a crop of honey is not an easy task, but after it is done, our work is not ended. Disposing of it at anything like a decent price takes about as much brains and hustling around as securing a crop, unless one happens to have a good near-by market. For the law's sakes, brother bee-keepers, try to dispose of what you have without sending it to the large cities where an over-supply grinds down the prices, so that when you go to sell your merchant a case of honey, he will look up St. Louis prices on honey, and offer you the same. Every bee-keeper should try to keep his honey away from the large market centers, for that is where prices are made, and we must then abide by them.

A Sweet Child Gone.—Bro. J. M. Jenkins, of Wetumpka, Ala., on Sept. 26th, informed us of the loss of his dear daughter, in the following letter:

FRIEND YORK:—After a long, lingering illness, my oldest child—a daughter 14 years old—passed away on Aug. 31st. Her remains were carried to Bozeman, Ala., Sept.

1st, on a special train accompanied by a large concourse of loving friends, among whom were her Sunday-school teacher and class; and little members of the Sunday-school society of which she was president. She was a very bright, sweet child, and much beloved by everybody, both white and black. I enclose a memorial card.

Yours truly, J. M. JENKINS.

On the memorial card referred to by Bro. Jenkins, we find these tender stanzas:

"A precious one from us has gone—
A voice we loved is stilled;
A place is vacant in our home
Which never can be filled.

God in His wisdom has recalled
The boon His love has given,
And though the body slumbers here,
The soul is safe in Heaven."

The readers of the BEE JOURNAL will unite in extending sincerest sympathy to our bereaved brother. We rejoice to know that his faith, like that of the beloved daughter's, is placed in One who is mighty to save, and will also comfort the sorrowing heart.

Illinois Convention Reports.—The Illinois State Bee-Keepers' Association still have a good many copies of their Second Annual Report on hand, and no postage to send them out. Any one sending eight cents in stamps to pay postage and wrapping, will receive a copy of same by mail; or seven cents in stamps will pay for a copy of the First Annual Report, if any one desires it. Address, Jas. A. Stone, Sec., Bradfordton, Ill.

A Carbolic Acid "Bee-Escape."—Bro. Holtermann, in the *Canadian Bee Journal*, says that he uses, instead of a bee-escape, "a cloth dipped and wrung out in a weak solution of carbolic acid laid over the section-crate." Here is his own description of it:

There is no doubt that the escape adds much to our comfort, but we doubt very much if it is a labor saver. Comb honey can be removed very rapidly without the bee-escapes. Our method has been given before, but we will repeat it. Some years ago we read in the *British Bee Journal* that a cloth dipped and wrung out in a weak solution of carbolic acid laid over the section-crate would drive out the bees. For several years we have removed all our comb honey in that way. The bees appear to leave the sections instantly, and only cling to the bottom-bars of the section-holders, or the bottom wood of the section. From these the bees can be brushed, and the honey can be removed almost as quickly as the escapes can be put in place.

We could not be induced to make, during the honey-flow, a practice of putting on bee-escapes during the day. Such must tend to demoralize a colony and suspend the gathering of honey for the day. We perhaps do not sufficiently consider that every change in the hive, and every disturbance temporarily checks the gathering of the honey. This is especially true during a season such as the past.

Wonderful "Science."—Mr. W. K. Fisher, of Lake George, N. Y., sends us the following, dated Sept. 5th:

EDITOR YORK:—Very recently I came across this clipping in the Boston *Daily Traveller:*

NO LONGER "THE BUSY BEE."

Science has shattered another tradition. The bee, so long praised for its habitual diligence, is at last shown up as a loafer. An investigator of the habits of the *honey-makers* informs us that the popular impression that the bee is a "busy" creature is all wrong, and that as a matter of fact the little fraud works only about three hours per day, and is a most thorough-going loafer for the rest of the time. However, ages must come and go ere mortals will cease to think of the bee as other than a hustler improving "each shining hour."

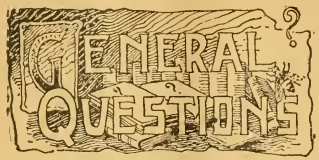
I think the writer of that might have better improved the "shining hour." If anyone agrees with him, why just let him look at an apiary in clover, basswood or buckwheat season! Not much loafing then!

W. K. FISHER.

How tired Science must be after making such an astounding "shattering" discovery! Who'd have thought it? The poor, lazy bee—and the "busy" *scientist!* We think the best thing to do is to let such "scientists" work themselves to death—the Fool-Killer will hardly care to waste his time on them.

Indianland and Wonderland is the title of a most beautiful tourist booklet of over 100 pages, 7x9½ inches in size, just issued by Mr. Chas. S. Fee, General Passenger and Ticket Agent of the Northern Pacific Railroad Company, St. Paul, Minn. It is different from the ordinary railroad publication, in that it is instructive, entertaining, valuable, artistic, and worth reading for itself. It can be obtained by sending 6 cents in stamps with your address to Mr. Fee, as above.

Have You Read page 510 yet?



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Source of the Royal Food.

Where do the bees get the royal food?
L. T.

ANSWER.—Much the same way as a cow gets her milk. She eats food and it becomes milk; the workers eat honey and pollen and it becomes royal jelly. Indeed, it was formerly supposed that the royal jelly was a secretion of glands, the same as milk, but at present I think the resemblance is not considered so close, but that the royal jelly, which, by the way, is the same as the food given to worker-larvæ during the first three days, is chyle from the chyle-stomach of the worker.

How the Queen Lays Eggs.

Please tell me whether or not the queen-bee lays all of the eggs in one cell, and the brood-bees place the eggs around? Please inform me of all particulars, as I would like to know about this matter. H. N.
Ashton, Nebr.

ANSWER.—It would save a good deal of travel on the part of the queen if she were allowed daily to drop her two or three thousand eggs all in one spot, but perhaps the workers think that would leave her too little exercise for her health, so they let her go from one cell to another and put an egg in each. She doesn't spend as much time to lay an egg as a hen, and she never cackles—just goes straight along to lay another. The workers do all the work of cleaning out and polishing the cells for her.

In the busy season, if you carefully lift out of a colony of Italians the comb having the queen, you may often see her go right along with her egg-laying. First she puts her head down in the cell to see if it is all right. If the chamber-maids haven't been around to slick it up to suit her, she goes on to another. If she finds that all right, she takes out her head, straddles her long legs over the cell, doubles up her long abdomen, thrusts the end of it down into the cell, and after a very short time withdraws it, when you can look into the cell and find an egg.

Stings of the Queen and the Worker.

Why has a queen that is reared from a worker larva a crooked sting, and a worker-bee of the same kind of larvæ a straight sting? E. L.

ANSWER.—I don't know. Perhaps the same reason that makes any one of the differences between a queen and a worker. You see a queen is a fully-developed female, and a worker is the same as a queen, only not fully developed. The amount and quality of the food given to the larvæ is what makes the difference. To the young queen is given a surplus, some of it being left in the cell when she emerges, but the young worker has to be satisfied with barely enough to bring it to the point of a full-grown worker, and not a speck of extra food is ever left in the cell.

To attempt to go any farther would be to enter the field of speculation, and that hardly comes in the province of general questions. If you want to theorize about it, you might take this theory: The amount of food given to the worker-larva suffices to produce the sting and polish it, but just at the point where the bending is to be done that makes the graceful curve, the supply of grub gives out, so the poor worker has to put up with a plain, straight sting. Other theories come crowding for expression, but I forbear.

Queen-Cells, Italians, Etc.

Well, Doctor, it's questions, questions, all the time with you, I suppose. But I think you will say so, when they get *too* numerous.

I introduced an Italian queen to a colony nearly black, about 10 days ago. I took the old queen out the day before, and introduced the new one by putting in the cage just as she came, and let the bees release her by eating out the candy. Five or six days afterwards I looked, of

course, to see how things were coming on, and about the second frame I took out had 5 or 6 queen-cells on it, one or two already capped. I thought my new queen was a "goner," sure; but on taking out another frame, what should I see but my yellow queen walking around as if everything was all O. K. I didn't see any eggs, but robbers were bad, and I wished to have the hive open as short a time as possible, so I didn't look very much for eggs. To-day I looked again, saw the queen, and she looked all right, had "fleshed up" some, was laying nicely, for this time of year—I have been feeding every night—but they had some queen-cups started again (I destroyed the others), and one of them had an egg in it.

Being anxious, for the reason stated above, to close the hive, I looked at only two frames, so I don't know whether there were more cups with eggs in or not. I have read your "Year Among the Bees," Root's "A B C of Bee-Culture," Doolittle's "Scientific Queen-Rearing," and several papers, but I do not remember seeing anything about bees building cells except to supersede or swarm. So I thought I would ask you, as I dislike opening hives late in the fall.

Do you think they will supersede her? If so, why? Would you advise any one to buy another queen in case they do, and introduce her this fall?

Do you use the Hoffman frame? The Hoffman frame and Italian bees have just about made me disgusted with bee-keeping. Mrs. Atchley says if she had to keep black bees she would only keep enough for her own use. I am just on the point of saying the same, only I will change black to Italian. I never had bees come four or five rods from the hive and hunt a person up on purpose to sting him till I kept Italians. I never knew what robbing was till I got Italians. The little, yellow sinners will rob rather than work on the flowers, except in an extra honey-flow. True, they stand on the comb better than blacks, but when one pops off it means business with the sharp end. There is nothing delights her quite so much as to kill other bees. Why, Italians of mine will actually tackle other bees 20 rods away from the apiary, at the watering trough! A small nucleus of them will sometimes rob a full colony of blacks!

I have had six or eight Italian queens, and not one as prolific as a black queen reared by a small colony to supersede the old one in the forepart of May, 1893. Now you will say, like my wife, "What in the name of sense are you buying Italian queens for, then?" Well, in the first place, Dr. Miller, Mr. Root, Mr. Doolittle, and 99 out of every 100 that write on bee-keeping, say they are the best. In the second place, they have been introduced into Denison and vicinity to such an extent that it would be almost impossible to keep blacks anywhere near pure. In fact, my blacks are mongrels—hybrids—but I've got some that are pretty black.

What is the matter in my case? Have I not had a fair sample of Italian bees, or am I one of those individuals that turns up every once in a while, that don't like anything just because everyone else does? Please don't say, "I don't know," but give us a good "out and out," if it takes all winter!

Now, Doctor, I will beg your pardon for being so familiar, as I *might* happen to see you some time. E. S. M.

Denison, Iowa, Sept. 25.

ANSWER.—Yes, I'll say so when questions become too numerous, but that will not be, so long as I can answer in print and the questions are such that answers cannot readily be found in the text-books.

You say you have seen nothing about bees building cells except to supersede or swarm. You mean bees with a queen, for of course you know that bees build cells intended for neither superseding nor swarming when they have no queen. I don't think bees with a queen ever build cells with any other intention than to supersede or swarm. There is a case, however, that might almost be considered an exception. A colony may have a queen that is entirely satisfactory, and one perhaps that they will retain for the next two years, but if something seems to threaten the life or usefulness of that queen, they'll start cells. Cage the best queen you have, and the bees will likely start cells. It's a plain case to them that their mother doesn't make very good work laying, and it is natural for them to suppose she's about played out. This summer the bees of colony No. 2 hadn't things to their mind in their own hive, and entered the nearest hive, No. 1. Next time I looked in No. 1 I found queen-cells started. I let them alone and I think the bees tore them down. Very likely the queen was balled by her own bees for safety on the influx of foreigners, and the committee which had that matter in charge concluded she wasn't fairly discharging the duties of her office, so thought it was best to rear a

successor. Better counsels prevailed when they saw her properly at work again.

As to your case, I shouldn't think it very strange to find the first lot of cells, and then have things all right, but that egg in a queen-cell after you had destroyed the first lot looks pretty plainly towards superseding. Still I think it quite likely the queen will not be superseded this fall, especially if you stop feeding every night.

You mustn't ask why bees supersede queens. That's one of the things I don't know. Old age is a sufficient reason for it, but there must be other reasons. I have had plenty of queens superseded before three months old. I could see that some of them were poor queens, and therefore it was right to supersede them. In other cases I could see nothing wrong with the queens, but I suppose the bees could. Sometimes a queen will be laying bountifully, then fail all at once. You and I could not anticipate this, but perhaps the bees could.

If I should give a guess in the case, I should say the bees may supersede your queen, but just as likely she'll be kept through the winter and superseded next spring.

In case she abdicates the throne this fall, it's perhaps an even "toss-up" whether you furnish them another queen or leave them to their own devices. I believe I would take the latter course.

The first Hoffman frames I had were so hard to get started at taking them out of the hive that I would rather tackle a hive of the old hanging frames; but the latest pattern are a real pleasure to handle.

Your Italians are a bad lot. Are you sure they are not hybrids? They are not a fair sample, sure. Try a queen from entirely different stock. I have serious doubts whether yours are pure.

Good Honey-Sellers will likely be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

Our Doctor's Hints.

By F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Tomatoes and Cherries.

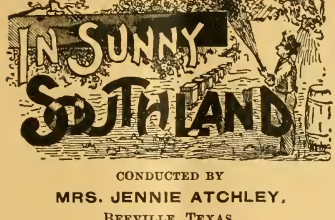
Isn't it remarkable what singular notions take hold of people, and how long ridiculous theories are entertained, even to the third generation!

Now, there is the one about tomatoes. Since I was a boy—and that's many years ago—I have heard repeated, hundreds of times, what terrible results followed the eating of this fruit—even to the production of *cancers!* What nonsense! There is, to my mind, no better or healthful fruit (or vegetable if you prefer to call it) than that beautiful red or yellow globe that grows in all well-regulated gardens. Its acid juices are exactly adapted to digestion, and keeps the stomach and bowels in splendid condition.

A hundred years, or more, ago, much sentiment attached to this splendid fruit. It was called "love apples" then, and though not in general culinary use, it was supposed to possess remarkable amatory influence, so that if a young lady could only, by hook or crook, induce her "steady" young man to eat any portion of one, he would soon forget his bashfulness and arrive at the essential point that would enable the thoughtful young lady to say "yes"—and make the services of the preacher a matter of rapid necessity. Smart girls in those days!

Then there are the luscious cherries. In ye olden times, and since, many have shunned the "snake berries," under the superstition that because Mr. Black-Snake often partakes of them, he poisoned them for the people. How absurd! And you'd be surprised how many people are yet to be found who still entertain this silly notion. But those of us who know anything, need not be told how beautiful on the tree, and delicious to the taste, are the inviting cherries. Indeed, the best medical opinion now prevails that no fruit is so certain to do good in all forms of liver trouble. Fresh, dried or canned, they should form a bountiful supply in the pantry of all intelligent house-wives who can possess them.

Great Premium on page 510!



CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Moths Destroying Comb Honey.

MRS. ATCHLEY:—I have been bothered lately with moth-worms eating my comb honey. They eat the caps off, and the honey runs out. What can I do to prevent it? Also, how shall I get those destroyed that are on my honey?

WALTER R. WOOD.

Bellevue, Del., Sept. 11.

Friend Wood, I would put the honey in a tight, small room, and fumigate it with sulphur sufficient to kill the moth, then air the honey well, and crate it and send to market. Or, if the honey is not too badly injured, you can just soak the sections in clear water long enough to drown all the moth, and destroy all the eggs. Dry them off, and they will be sweet and clean. But some times the wood of the sections gets a little blue, and does not look so white, but I like it better than the sulphur plan, as I have an idea that I can taste sulphur on fumigated honey.

If the unsealed honey in the sections is dissolved in the water, it will be better, as then they will not leak when crated again. JENNIE ATCHLEY.

Broom-Weed as a Honey-Plant.

MRS. ATCHLEY:—Yours of Sept. 11th, as well as specimens of the honey-producing plant, duly received. Accept my thanks for your trouble in sending them.

The plant is *Gutierrezia Texana*, of the order compositæ, named from Gutierrez, a noble Spanish family. Botanical lists do not give any common name for this plant, but the one in use in your locality —"broom-weed"—seems a good one. It is near to the golden asters (*Chrysopis*) and golden-rods (*Solidago*), and the button snake-roots or blazing stars (*Liatris*). I should think on account of its slender branches it would be difficult for the bees to find a lodgment, the blossoms being also small, and hence not easy for them to forage on. When fresh, however, I presume the stems are stiffer. No doubt it stands drouth better than many other honey-plants.

Yours truly, FRANK BENTON,
Assistant Entomologist.

Washington, D. C.

I am pleased to have the name of our common broom-weed known. The stems of this plant are quite stiff, and it is easy for the bees to gather the honey from the flowers. It is just now (Sept. 22nd) getting well into bloom, and will furnish food for the bees until frost.

JENNIE ATCHLEY.

The Death of Miss Mattie Edwards.

The late terrible catastrophe that swept away both life and property in Uvalde county, Texas, and opened wide the flood-gates of sympathy among a generous and sympathetic people, removed forever from human help and view many who, from various estimable reasons, had endeared themselves to a community that however heretofore obscure, has within the last few days acquired a world-wide prominence. Notable among the victims of so appalling and lamentable an event, was one young in years, who had reached that period in life as regards her sex denominated all the wide world over as "sweet"—a blessing and a delight not only to her grief-stricken family, but also to the town of which she was a resident. In the death of Miss Mattie Edwards, a bright and shining light has been extinguished, an ornament to her native State and country is missing, and a promising member of the rising generation has been cut down just as the tender bud of young womanhood was beginning to expand into a realization of all that is innocently pleasurable in life. But this sweet, and pure, and noble girl is to be named with those of whom it is written, "An unspotted life is old age."

The father of the subject of this obituary—a prominent and extensive apiarist in Texas—has in this doubtless saddest experience in his life, the heartfelt and tenderest sympathies of the entire apicultural world.

Beeville, Tex. R. S. FOSTER.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

THE HONEY SEASON OF 1894—HONEY-DEW.

BY G. W. DEMAREE.

I believe I have written something under head lines similar to the above each year for several years past. We have not had a good honey year since 1891; since then the honey-yield has graded downward to *no good at all* this year. We have reached the bottom, *surely*, for there is no vision beyond. If I have seen a drop of honey in the season of 1894, up to Sept. 19th, I was unable to recognize it. Since the latter date, our bees have been gathering honey slowly from golden-rod and white aster. The best colonies may get winter stores yet.

How have our bees lived? Well, we had a visitation of "honey-dew" in the month of June, amounting to "surplus"—the like of which has not been seen here during my career as a bee-keeper. It was the salvation of the bees, though some have starved in the long dearth that followed. I took with the extractor five or six hundred pounds of "honey-dew," and it is a curiosity in the way of a natural product. Perhaps the bees "made (?) it," according to the "wise men" of the West!

I have been a close observer of "honey-dew" for a long time, and I have found that this product varies more in *quality*—if that term can be properly applied to an article that has no recognized standard as a point to judge from—than any other natural product that has come under my observation. It may safely be said that honey-dew grades all the way from "filth" to the threshold of pure honey. But the characteristics that never forsake "honey-dew" are "stickiness" and the total absence of cane-sugar. No product wholly composed of the substance ingeniously called "honey-dew," will granulate like pure honey; but a mixture of pure honey with it, will show granulation in cold weather, therefore the only sure test of honey-dew is "stickiness." By this characteristic it may be known from true nectar (honey) by any close observer. It's "sticky" texture, like "stick 'em fast," is so well marked that no person need mistake honey-dew for honey.

It is sometimes asked if it is proper to sell honey-dew. This must depend upon its *quality*. Some of it is a good, wholesome sweet—long experience has proven this. I sell it when it is good, telling my customers just what it is. It is one thing to be honest, and another to *escape censure*. I prefer the former.

SEVERE DROUTH.—The rainfall here has been so uncertain and *local* and disappointingly light all the season, attended with high temperature, that everything has assumed the dread appearance of extended drouth. Notwithstanding, our staple crops, wheat, corn, oats, tobacco and hemp, are fairly good. But our pasture lands have suffered for moisture, and this includes bee-forage.

It would be interesting to have short reports from the localities where honey-

dew has appeared this season. I feel anxious to learn in what localities in this country it has been most abundant, and where it has appeared in any form.

PREVENTION OF SWARMING.—I think Dr. Miller's query, "Why not leave a hole for the drones to get out without any 'escape?' in that plan of W. C. Lyman's," is well put. I should say, why not?

In practicing my plan to prevent swarming—which consists in the simple manipulation of raising the brood above the zinc excluder, and starting the queen afresh below—I make a hole in the upper story for the drones to escape from the upper story, as they cannot pass out at the entrance because the excluder is between.

In my experience of five years, I have never had a young queen mated above the excluder. The reason why young queens do not *mate* above the queen-excluder, is because, in my practice, I use plain sheets of perforated zinc *strung taut* in wood frames, and while the excluder effectively *excludes*, it ventilates so thoroughly that the two departments of the hive are practically *one*, and therefore the bees will not permit a young queen to *mate* unless they are ready to supersede the old queen. If wood and zinc honey-boards are used, they practically divide the hive into two departments, and the young queen may be permitted to *mate* from the flight hole made for the drones in the upper story.

WATER FOR BEES.—In all my experience I have never seen bees make such a scramble for water as they have since the middle of July. So many of my bees have been drowned and otherwise killed about the watering-places, that it has told visibly upon their normal strength. Putting out water for them proved no remedy whatever.

BEE-PARALYSIS.—I have not seen a sign of bee-paralysis among my bees this hot summer. There were no blooming plants to secrete opiated nectar, to produce the trouble.

Christiansburg, Ky., Oct. 1.

VALUE OF BEES TO BLOSSOMS.

BY W. H. MORSE.

Almost all bee-keepers are aware of the great value the honey-bees are in the economy of nature, but the general public, and even the agriculturists, in many cases, are sadly ignorant on this point. In fact, some plants are so constructed that without the aid of the bees and other insects of its class, the plants in time would cease to exist, because not being able to reproduce their species, the old plants would die, and, no seed being produced, the result would be extinction of the class. As all vegetation has a limit to its age, and no matter how we may propagate, we only extend the growth of the individual unless we start with the seed, which will give us a plant endowed with the vitality of the parent.

Again, there are varieties of fruit-trees which our California friends well know that are barren of fruit, owing to some defectiveness in the pollen becoming ripe previous to the stigma, or *vice versa*; or, as I am inclined to think, through a disease in the pollen. But be that as it may, the bees will overcome that difficulty, as we all know who have given the subject careful thought.

For instance, suppose we have any fruit-tree which blooms but fails to set a crop of fruit. In such a case, if the trouble is in the pollen, which it generally is, the bees visit a healthy tree and load up with pollen, and then carry the healthy pollen to the tree which has the diseased pollen, and the result is a healthy set of fruit, and in all cases it benefits the fruit. And if the honey-bee and other insects

of its kind had not been in existence, I doubt very much whether we would eat such delicious fruit as we do to-day; as the knowledge of hybridization was not in former years so generally understood as it is now.

But the point I am trying to show is, that bees are of inestimable value to the fruit-grower, and that it is ridiculous in any one to suppose that the honey-bee does any harm to the fruit-blossoms which they visit, by abstracting the nectar, which they think should go to nourish the embryo fruit. But from the writings of the most scientific botanists, and my own experience, the nectar is produced most copiously at the time the stigma is nearing maturity, and when the whole flower may be said to be in a state of extreme vigor, and if the pollen fails to come in contact with the stigma, the nectary continues to secrete nectar for a short time, as if to try to keep up the fast falling energy of the stigma; but, on the other hand, if the stigma is fertilized, then all the energies of the plant is directed to the young fruit, the nectary becomes withered, and the leaves take its place; so, as a result, we see the bees load the pollen baskets generally with the fresh-matured pollen, and in its travels carries it to the matured stigma, thereby helping Nature. So we see that Nature has provided a surplus of nectar as if to entice insects to help her to perform a task for the general building up of the vegetable kingdom.

PLANTING BASSWOOD TREES.—Dr. Miller said in his "Notes and Comments" awhile ago, that you must first get trees before planting them. It would be comical, Doctor, to plant them if you did not have them; but if you seek out some basswood trees that were cut last year, you will find a lot of young growth around the old stump, and if early next April you cut them all off close to the stump, and plant them in a row as soon as cut, you will have some young basswood trees in a short time.

Florence, Nebr.

WINTERING BEES IN CLOSED APARTMENTS.

BY CHAS. DADANT.

In warm countries, as in Italy, for instance, the hives are often placed in frame buildings, each hive having a hole in the southern wall, through which bees can fly out. The room is carefully closed in winter, and, as the outside temperature gets rarely lower than a few degrees under the freezing point, the bees can stay in good health for the winter, even when they have nothing else to live on but heath honey or honey-dew. But, in this country, such a dwelling would not succeed. We have seen it tried, and the owner of the bees lost all—about 40 colonies—when he made the experiment.

It is true that such a room could be warmed, but the results would be about the same, for it is difficult, if not impossible, to maintain the temperature of the room exactly between 42° and 46°; for, very often, a warm day is followed by a very cold night, or *vice versa*. When the mercury rises to 48°, or more., the queen begins to lay, and the bees, unable to fly out, become uneasy. On the other hand, at 35° or 38°, the bees eat more to raise the temperature, and as soon as their intestines are filled, they get the diarrhea. Besides, in both cases, they suffer from dampness.

It is, therefore, less difficult and more safe to winter bees in silos or in cellars. I have tried the silos or in cellars. I have tried the silos for three years. These silos were dug in a sound and well-drained field. They consisted in ditches as long, large and deep as was necessary to accommodate the hives. On the bottom of these ditches I placed two scantlings to support the hives a few inches above the ground.

When the hives, without tops or bottoms, were placed, I covered the ditch with a slanting roof made also of scantlings, on which I spread a good coat of straw, then of earth, and a second coat of straw and earth. To give some air to bees, I built two chimneys, two inches square inside, at both ends of the silo.

During the first two years, the winter having been dry and cold, I succeeded splendidly; but, when I unearthed my hives after the third winter, I found every comb damp, or even moldy, a part of the colonies were dead, and all the others were more or less depopulated, the winter having been warm and moist during the usually coldest months.

Some bee-keepers build, on purpose, cellars which are half below and half above the surface of the soil. I have never tried them, and I suppose that such cellars may succeed on the condition that their walls are sufficiently thick, and furnished with double doors for the entrance, with straw between to shield the inside against the fluctuations of the outside temperature.

As to the cellars under inhabited houses, I have tried them with success, yet I prefer to winter bees on the summer stands.

As a part of the subscribers of this paper live farther North than I do, and as bees cannot endure a seclusion of two or three months, I will give the conditions which I think the best to succeed.

The cellar ought to be mice-proof, dark, well aerated, and as dry as possible; yet I have seen water wetting the soil under the hives without bad results.

The cellar ought to be deep enough under the surface of the soil to prevent its temperature from being too much influenced by the outside fluctuations of the weather. Of course its ceiling, unless it is vaulted, ought to be plastered, or otherwise well protected. The space of ours, between the floor above and the ceiling, is filled with sawdust, and the bee-room is separated from the part of the cellar used for the needs of the household, by a double wall made of boards with sawdust between the sides.

A bee-cellar must be provided with some ventilation from the outside. Some bee-keepers ventilate their cellars by means of pipes dug in the earth. I did not try these pipes. My cellar has two windows and shutters with a wire-gauze between. The air that slips through them seems to suffice, although these windows and shutters are nearly always closed; for we never open them, except during cold nights, when the weather has been too warm in daytime. Of course we keep a thermometer in the cellar; but we could do without it, for, as long as the thermometer remains between 42° and 46°, the bees are so quiet that it seems that they are all, or nearly all, dead; while at 48°, or more, the bees are uneasy, the queens have begun to lay, if this temperature has been maintained for a few days, and the workers are impatient to fly out. On the other hand, when the temperature of the cellar goes down to 40° or less, the workers flap their wings to raise it; then they eat more, their intestines are soon filled, and they get the diarrhea. So the noise of the bees is a good indication in the wintering in cellars.

Some German bee-writers advise bee-keepers to give water to bees wintered in cellars. I tried it long ago, with bad results.

A wise precaution, not to be forgotten, is never to put bees into a cellar but after a clear and warm day, during which all the bees have flown outside to get rid of their feces, as there is more room in their bowels to keep the residues of their digestion during their long captivity.

I consider it also necessary to mark the place of every colony in the apiary, so as to return them as exactly as possible on the same spot, and to commence the moving of the bees by those which are located the farthest.

The best time to bring the hives in the cellar is during a cold day following a warm one. If the bottoms of the hives are movable, it is better to leave them on their place, using a false bottom to convey them to the cellar, where a bottom is not useful. As soon as a hive is placed, its top ought to be moved, so as to give the bees a current of air inside, and wedges about two inches in thickness should be laid on the top of the ceiling to separate the hives from one another.

The bees ought to remain undisturbed in the cellar until March or April, according to the latitude. They should be removed in the morning of a warm day, to give them a chance of flying out. As soon as about 10 are returned to their old place, it is well to wait about 15 or 20 minutes before removing another batch, to prevent a too crowded flight of bees at the same time, for sometimes they fly out in such numbers that they mix together and go in the most populous hives, to the detriment of the weaker ones.

When bees have not suffered during their seclusion, this removal is easy; but if they have become uneasy, especially if they have suffered from the warmth of the cellar, during one or two weeks or more, they are ready to leave the hive in which they have suffered, and desert in crowds. They mix with others. Then you find hives with two or three balled queens, which have deserted their own with all the bees. You try to return these queens with some bees, but you do not succeed very often, and cure the business. I have experienced such annoyances, which have deterred me from wintering bees in cellars.—*Prairie Farmer.* Hamilton, Ill.

NOVEL METHOD OF FINDING BLACK QUEENS.

BY J. E. ARMSTRONG.

"One swallow does not make a summer," nor does one fact prove a rule, but my one experience in this line may be of interest if not of value to others. All bee-keepers who have kept black bees, or Carniolans, complain of the difficulty of finding the queen while examining the colony. During the past summer I tried an experiment which thus far has been a success.

The power of a young queen to mark her home so that she may return to it after her nuptial flight, has long been known. Any one who has watched the first flight of young bees must have noticed how they fly with heads toward the hive, circling farther and farther away as if surveying every object around the entrance, then the surroundings of their hive. The young queen does the same, though probably in a more critical manner. I say probably, for nature has displayed wonderful forethought in caring for the queen-mother in her peculiar instincts.

In uniting colonies it is a common practice to spray both colonies with peppermint. We thus recognize that the sense of smell plays a part in recognizing friend or foe. I speak of this because I believe the sense of smell may also assist the young queen in finding her home, or in distinguishing it from others.

During the month of July, this year, I reared some queens in cages. I took one of these young queens into my conservatory and opened the cage in my hand, allowing the virgin queen to fly for the first time. She circled round my hand for some time before she would venture away any distance. I allowed her to remain at liberty for about an hour, and during this time she came back several times and circled around my hand as if she recognized it as her starting point.

I then put her into a queenless nucleus, where she was accepted. She soon made a successful flight, and began laying. I built up the nucleus into a good-sized colony, and every time I pick up the frame she is on, she quickly crawls up to my hand, crawls about *on* my hand a few moments, and then goes back to her family.

I have opened her hive about once a week since the middle of July, and she has never failed yet, to come up and make me a visit. I fear each time that she will fail to do me the honor of such a visit, but so far she has not.

I have now five other colonies—some Italian and some Carniolan—and at no time has any other queen of either race paid me such a visit. I am seldom able to find my other Carniolan queen, though I have frequently searched the frames over twice. It may be this is only an accidental freak, and old bee-keepers may laugh, but it seemed to me those engaged in rearing Carniolan queens, might easily test it, and if it proves true, would be a great help.

Why not educate the queen that is hard to find, to come up like a lady and receive us royally when we call upon her, instead of running away and telling the children to say she is "not at home?" Englewood, Ill.

VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

THE NORTH AMERICAN.—I think it can hardly be said that the AMERICAN BEE JOURNAL has taken no interest in the matter of the convention of the North American Bee-Keepers' Association at St. Joseph. Every number for some time has devoted a considerable space to it, the last number before the convention giving to it about 2½ pages. *Gleanings* has also given more space than usual to it, and has also some sensible things to say as to its constitution and by-laws. *Progressive* also is wide-awake.

It will be a fine thing if so much interest can be awakened that the Association shall be made more nearly what it ought to be, a representation of the bee-keeping interests of every State and Province in Canada and the United States. By the time this is in print the St. Joseph convention will be a thing of the past, and I am hopeful that some steps in advance will have been taken.

The suggestion of Bro. York as to semi-annual meetings will, I think, have serious consideration. A meeting in California would interfere with one in Canada to no very great extent if both should be held on the same day. I doubt if ten that go to the one convention would be likely to go to the other. And whatever interference there might be would be almost entirely set aside by having the meetings six months apart.

EDITORIAL "WE" OR "I."—On page 424 I find: "The AMERICAN BEE JOURNAL still prefers to use 'we' in its editorial department, though both the *Review* and *Gleanings* will now be putting in their 'I's' instead." Yes, Mr. American, and I don't believe they are putting out their eyes by putting in their I's. And I'm glad you say "*still* prefers." I was *still* in bed at 4 o'clock this morning, but I'm not now. And although you *still* prefer to be counted two men instead of only one, you'll not always prefer that sort of foolishness. Why, bless your heart, you dear old fogy, don't you know that "the world does move?" Don't you know that the women of the great State of Colorado are now the equals of the men, voting for all offices, and that the next State legislature will have women in it, whichever party wins? Oh, yes, this is an age of progress, and you'll not always present the anomaly of being abreast of the times on other matters, and away behind the procession on this. And on this point did you notice* the wicked wink in Ernest's left eye, when in last *Gleanings* he said to me, "Say; ask York whether he likes figs."

NON-SWARMERS.—Mrs. Atchley thinks it's against nature to have bees that don't care to swarm, and if you get 'em they'll be worthless. I can't fight you very hard

on that, Jennie, 'cause I don't know, but this fact stands out, that some of the best yields I've had were from colonies that made no attempt to swarm, and others have reported in the same way. But we don't get on very fast at getting bees that are non-swarmers. Heddon thinks he's getting there, but Hasty thinks it's the seasons and not Heddon's bees. In the meantime I'm going to rub along with the swarmers, and try to keep them from swarming all I can, in spite of *nature*.

SWARMING AND INCREASE.—"Many men of many minds." S. C. Markon (page 442) thinks that with swarming, byhis method, he can get more honey in a good honey-flow "than can any person with any method which prevents natural swarming," and then asks if he isn't right. I don't like to be too positive, Friend Markon, for there are a good many things I don't know, but it looks a good deal as though the majority of bee-keepers did not agree with you. Years ago the number of swarms obtained was considered the measure of success, and the man who had three or four swarms from each colony was very "lucky." Later, the question began to be asked, "How can *increase* be prevented?" Within a few years the question changed to "How can *swarming* be prevented?" Why should this question be asked so often and so earnestly, if swarming be desirable, or how does it come that lately non-swarmers can attract so much attention? Marengo, Ill.

[*Yes, yes, Doctor, *we* hear all you say, but *we* haven't time now to attend to your questions. *We* are getting ready to be off to St. Joe. But just wait till *we* get back, and maybe you'll wish you hadn't put in *your* "I's" at all.—EDITOR.]

BEE-KEEPING IN CALIFORNIA.

BY W. A. PRYAL.

The bee-region of California, as almost every one knows by this time, is in the lower counties. These counties are all south of the Tehachapi Pass, on the line of railroad running south from San Francisco, and may be designated as the counties of Santa Barbara, Ventura, Los Angeles, Orange, San Bernardino, San Diego and the new county of Riverside. What is usually referred to as Southern California includes the counties just named, and the southern portions of San Luis Obispo and Kern counties. Of course, there is no real geographical division to distinguish any particular portion of the lower part of the State from that more to north. It is generally admitted that the counties first named have the most equable climate in the State, though even counties three or four hundred miles further north have fine climates—so much so, that their oranges and other fruit come into the market earlier. But for all this, there is no doubt that a large portion of the lower part of the State is more than able to hold its own against the rest of the State.

In many of the level places, and in patches through the hills and mountains of this southern part of California, the celebrated white and black sages of honey-fame grow. As the plains where these sages were once wont to grow in all their native luxuriance are now mostly given over to orchards and smiling gardens, the bee no longer finds sage bloom there. The sages still grow in the hills and mountains, though not as numerously as in years gone by. This is owing, mostly, to the fact that the ranges have been pastured to sheep. Then fires have swept over great tracts of sage fields, destroying, as it went on its mad career, thousands of acres of this grand bee-pasture. Through the timely forethought of some bee-keepers these devastated pastures have been in a measure restored to their former usefulness; this was done by reseeding the districts burnt over, with sage and other seeds. It

s said that replanted ground gives better pasturage than that which was burned over.

Besides the sages, the lower counties have several other kinds of bee-forage. None of them, however, are considered as good for the bee-keeper as the sages. The honey is not as light-colored as the former. In some of the districts in southern and central California, are large alfalfa fields which make fine bee-pastures. The honey gathered from this species of clover is very clear, and commands a ready sale. Kern and Tulare counties are, I believe, the great alfalfa growing counties of the State.

It would not be well for the prospective bee-keeper to locate too near a big city, for he would have to pay a very high price for his land in the first place, besides the forage for the bees would not be as likely to be as plentiful. The only reason why any one following an agricultural pursuit might with safety locate near a large settlement is that, being near a big market, he can sell his goods to better advantage—they would go off quicker and realize a higher price. Near such a place he could carry on a mixed farm in a profitable manner. There is hardly a season but that he can find the market in a condition to take some of this produce at an advanced price. Last year, for instance, butter, eggs and honey were above the usual figure. The consequence was, the small producer did pretty well. Some years he does not do as well, for everything he raises is at bedrock figures. I will not discuss what the bee-keeper here can carry on along with bees, but pretty much anything that will go well with them in the Eastern States will do equally well out here, I am sure.

It is no longer necessary to bring bees to this State. The man who intends to go into the business here can find all the bees he wants for sale at prices lower than what the freight would cost him on his bees from the East. I have known colonies in box-hives to be sold for 25 cents apiece. All the bees that the apiarist starting in the business here might want, may be had at $1.00 per colony, at most. Of course, bees in serviceable hives will cost a little more. Occasionally an apiarist can be found who wants to dispose of his apiary. Often these men who are going out of the business sell at a figure that is a big inducement to one who is desirous of buying an apiary.

I would not undertake to advise any one just where to locate; the person himself must determine this question. He must be governed by the other occupation he intends to carry on in connection with bees; also, whether or not he wants to be near or far from civilization. Though there are some fine bee-ranges in the upper part of the State, I would not recommend any one to try any of them until such person is sufficiently satisfied that the northern range he has in mind is a real good one. It would be far better to stick to those that are fully tried than to fly to those we know not of. If one wants to produce alfalfa hay, then he should try the upper San Joaquin country; that is, in the counties of Fresno, Tulare and Kern. This is an irrigation country, and large crops of hay are "raised" by means of water. The finer honey comes from near the hills where irrigation is not relied upon so extensively. Land in these irrigated districts is sold differently from other lands, owing to the fact that it is, for the most part, owned by irrigation companies. The irrigation laws of the State have given companies certain privileges, and it is a good thing, for it is doubtful if the dry sections of the State would ever have been reclaimed. In the upper part of the State, and along all the coast counties for the greater portion of the State, irrigation is not required.

Fruit trees grow anywhere in California; some varieties do better in one portion than another. The finest oranges are said to be grown at and around Duarte,

22 miles east of Los Angeles, and about Riverside, in the new county of the same name. Equally as good oranges come from Butte and Placer counties, all of 500 miles further north. Apricots and peaches and prunes do splendidly in the lower counties, while cherries do better in Alameda county, opposite the metropolis, than anywhere else. Raisin grapes do well almost anywhere, though the greatest raisin country in the world is in Fresno county. The great fruit counties are Alameda, Santa Clara, Solano, Orange, Butte, Sacramento, San Bernardino, San Diego, Tulare, Ventura and Yola.

It is estimated, from what figures that were available, that 323,915,185 pounds of fruit were shipped from California by railroad in 1890. What the output will be in a couple of years from now, when the large acreage of young trees that have been set out come into bearing, it is hard to tell. It is sure that it will be something surprising. It is the rapid strides that the fruit industry has made that has been one of the stones that were thrown in the path of the apiarist. In some places the aggressive horticulturist who says that the bees destroy the fruit, has compelled the apiarist to seek pastures new, much to the latter's discomfiture. There is a constant war going on between the two industries; the fruit-grower somehow or another manages to crowd the bee-keeper to the wall every time. I am of the opinion that after a few years there won't be such a fight between the two occupations. Why, I will not discuss at this time. I will say, however, that I think the apiarist will come out at the larger end of the horn.

North Temescal, Calif.

(Concluded next week.)

STRONG COLONIES—NON-SWARMING.

BY E. S. LOVESY.

If there is one question of more interest than any other it is in keeping strong colonies. If there is a secret in bee-culture it is in manipulating your bees so as to always keep them strong. If they are strong they will stand the winter and spring better, and they will keep down their enemies easier, such as ants, wasps, moths, etc.; and when there is a honey-flow they will gather it. I regard this as an interesting question. Who among our bee-keeping friends will give us their experience, or some pointers on this subject?

NON-SWARMING.—I have noticed much of late in the BEE JOURNAL on this question. You can count me as a "non-swarmist," even if I am in the minority. I work my bees on the non-swarming plan simply because it pays the best. With the right kind of bees and hive, and with proper care, you can run them as strong as you like, and they won't loaf, hang out on the hive, or swarm. I think there is as much difference in bees as there is in stock as regards the scrub and best breed.

Last spring, through the burning of a neighbor's barn, we had the misfortune to have our bees all burnt up. Of course I had to buy more, and some of our friends thought that I exhibited more grit than judgment; but I have sold more honey and wax of this year's crop than my outlay, and I still have the bees, hives, and more than half of the crop to dispose of. But the point I was going to mention is this: I bought four lots of bees—three of which I hauled home, and all that were not in the Langstroth hive I transferred to that hive. I increased them about 20 per cent., and they have gathered honey to exceed 100 pounds to each colony.

One lot of over 20 are still out where I purchased them, and in every conceivable kind of hive, with the combs crossed so that I could not get them into shape to control them. Some of those bees have swarmed themselves to death. Two of

them, with only a small handful left, were finished up by the moth; and they have not gathered over one-third as much honey as the non-swarmers.

Again, by the non-swarming method you can rear your queens from the very best stock, and thus improve them. Of course, if you over-divide, it would be like over-swarming—they will not do as well. I cannot name the many conditions for want of space. I am aware that a large swarm will sometimes gather considerable, but it is often at the expense of the colony that they swarm from. But I do not wish to argue this point with our bee-keeping friends, aside from which pays the best. Many are opposed to any method of increase except by swarming, as they say it is the natural way; but why stick to nature on the swarming question any more than on any other question in bee-culture? Who will give us any reason why we should?

Salt Lake City, Utah.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Fine Crop of Honey.

I have 50 colonies of bees, and a fine crop of honey. FRANK WILKINS.

Pelham, N. H., Sept. 30.

Feeding Bees—The Season, Etc.

I hear a great deal about feeding bees. I raise the front of the hive up about four inches with a block, so that the honey will not run out. Then I pour in 10 or 12 pounds of honey at night, and by morning the bees have it put where they want it. I used to take out frames of bee-bread and put in frames of honey, but maybe I wouldn't put the honey where they wanted it. Bees want bee-bread to winter on; if they didn't want it they would not gather it. Bees in the North need 30 pounds of honey to winter on. Bees want bread to eat with their honey—and so do I.

I got no surplus honey this year, but I am thankful that the bees gathered enough to winter on, and enough for my family, for we all like honey. We had only three rains in four months, but we are having a good rain to-day. If we have plenty of rain this fall, so as to wet the land well, we will expect a good crop next year.

This has been a good year to raise chickens—no rain to drown them. I raised 300 Partridge Cochins this year, and they are good ones. I run a mixed business—farming, bees and chickens. I find that these all work well together. When it gets too dry for the farm and bees, I can raise chickens. I look after the sitting hens, young chickens and bees at noon while I am resting. I feed the young chickens three times a day. If you want to raise chickens, you must get from a large breed, as the small breeds are not worth their feed. I have tried them. GEO. W. NANCE.

Anthon, Iowa, Oct. 1.

Ready for Winter.

Bees are in fine condition for winter here. FRANK COVERDALE.

Delmar, Iowa, Oct. 4.

Hives Favoring Moth-Worms, Etc.

In regard to the query about moth-worms, answered by Dr. Miller on page 394, I believe the fault is often as much in the hives as in the bees. My own bees are hybrids, and I am confident of their ability to handle the moths as well as pure-blooded Italians, if in a hive of proper construction. But in a hive with the bottom-board nailed on, and the frames nearly resting on it, with space so small at the bottom and sides that the bees cannot get between the hive and frame, you have conditions that distinctly favor the moth.

Outside of the large apiaries run by advanced bee-keepers, a large proportion of the hives in use are faulty in regard to proper bee-space. There should be no place in the hive large enough to shelter a moth or worm and

not large enough for the bees to enter freely.

The hive I use has no bottom-board, being set on a platform in the yard, and has a bee-space of ⅜-inch at the top, sides and bottom of the frames. In an experience of ten years I have never lost a colony or even a square inch of brood from moth-worms.

Some years ago I bought a number of colonies in tight-bottom Langstroth hives. On overhauling them I found the bottom of the frames stuck to the bottom-board with propolis, the same being honey-combed and alive with worms, and the bottom of the hive an inch deep with dead bees and mould (in May). I think even Italians would not have been able to hold their own in such hives.

This has been a rather peculiar season with us. There was plenty of clover, but little honey from it. Our crop came from basswood, on which we had only one week, but in that one week secured over 3,000 pounds of surplus in the comb. Spring count, we had 87 colonies, and increased to 113. The bees are in good condition to winter, with an average of 40 pounds of honey to winter on.

T. B. BLAIR.

Neenah, Wis., Sept. 27.

Will Not Have to Feed.

We have had a bad honey season here. I got only 400 pounds of comb honey, and the most of it was from sourwood bloom. I had 35 colonies, spring count, and some of them were so weak as to be of no good in the honey harvest. I have increased to 53 colonies of Italian and hybrid bees. Bees are booming on a new fall honey-plant that has come into this country in the last few years. It is in full bloom now. We will not have to feed any for winter stores.

JACOB FRAME.

Sutton, W. Va., Sept. 29.

A Laying Worker "Kink."

I like that idea about writing up the "kinks." No doubt we greenhorns that are young in the bee-business, would sometimes give an experience that would be of some benefit to the youngsters, while the old hands would probably think it a waste of paper and time, to tell what they had known for a quarter of a century. The thought of that, I suppose, makes a good many of us loth to appear in print and be laughed at by the professionals.

Now I had my first experience with laying workers the past summer, and I am going to tell how I got rid of them, at the risk of being laughed at by all of you.

You will observe before I got the best of it, that it was a costly job, but I gained my point, and that was what I was working for, regardless of cost.

Well, it was a queenless colony (of course we all know that). The first queen introduced was killed, the second shared the same fate, then I commenced to think something was wrong. I called in an old bee-keeper, who showed me at once what the trouble was, and advised uniting with another colony. It would have been much cheaper, but I wanted to experiment.

I sent for another queen, and in the meantime gave the colony two frames of hatching brood. In three days the queen arrived; I then changed places with another colony and introduced the queen the usual way, and now what was formerly a black colony, is a beautiful Italian. As it was at the end of the honey-flow, jumping with another colony did no material harm.

After looking over this, I think it would fill a "kink" in the waste-basket admirably. F. T. BROOKE.

Brookewood, Va.

"Washington Flax" Again.

"Is it a good honey-plant?" will be asked. The following answer must suffice:

Heretofore I have found my bees in the city cease storing honey about July 10th to 15th. In other places in the county, where flax is plentiful, they continue until September 15th, and this season many colonies having access to the flax have put up in supers 100 pounds of surplus comb honey.

About July 20th, this season, I removed my whole apiary three miles out among the flax flowers. One colony with an Italian queen from Massachusetts, I had reduced by taking frames to rear queens for other colonies. I put it on the scales the first day (about April 20th) and it weighed 34¼ pounds; a week after, it weighed 38; a week later, 40; exactly a week later it weighsd 42 pounds—sufficient to winter, as the hives weigh 18 pounds. All my other colonies did equally well or better. After I saw this, which was a test, I made up my mind that the "flax" is a superior honey-plant.

The Department at Washington has ordered seeds, and the plant itself, and

possibly we will know what it is very soon.

I have been a bee-keeper for 40 years, and believe I know a little about the business, but my principal study the past few years was to determine the proper plant to propagate so as to furnish the busy workers food when from drouth or other causes the crop was cut off.

I find by sowing buckwheat, a failure some seasons; dries out; the same with hoarhound, catnip and other plants. The Washington flax grows here almost everywhere in the timber, especially where part has been removed, or in logging camps, but this year's experience shows that about Sept. 15th it goes to seed.

I have had the best luck with sweet clover. Here I have it 10 or 11 feet high, and my two colonies I have at home are working on it, and it shows indications of being in bloom until frost. As a honey-plant, I pronounce sweet clover superior to all, and the flax next. If the bee-culturist had an acre of sweet clover and one of flax, he would need no other fall feed, as both stand the drouth—both are perennial—and after you have the roots once growing it will take care of itself. All stock should be excluded.

In States as far south as Kentucky, plant either as soon as the seed arrives. In States where the freeze is considerable, I would take early spring for it.

I mail the Editor a specimen of Washington flax, buds taken while out at my apiary last week. R. H. BALLINGER.

Port Townsend, Wash., Sept. 24.

Honey Thieves Caught.

On the night of Aug. 15th two unknown men entered my bee-yard and stole 86 sections of honey, supers, and what bees were in the same. I had them tiered up, and was going to take it off the next day, but they saved me the trouble. They went ¼ of a mile and built a fire to smoke and burn the bees.

When I arose in the morning, I discovered a smoke, and at once looked into its cause, and discovered bees, empty sections, and some honey; that the sections were burnt off, and lots of dead bees. I scratched my head a moment, and then, not like a bloodhound with my nose on the ground, but like a greyhound, went by sight, looking for tracks. I soon discovered the direction they took. I then used the telephone. At 5:30 p.m. of the same day I was called by the prosecuting attorney, and after answering the call, he said: "We have caught your honey thieves; have tried them, found them guilty, and they are sentenced to the house of correction for 90 days!"

I went the next morning to see them, and give them a little advice, but they had gone, accompanied by the sheriff, to take a free ride of 195 miles.

This is how I described the thieves: "Two men having honey in supers, smoked and leaking. Honest men do not carry honey that way. Men are daubed with honey, and faces and hands swollen by bee-stings."

My description gave satisfactory evidence as to cause the arrest.

J. W. MILLER.

Rodney, Mich., Oct. 1.

Laying Workers—Introducing Queens

If any one has a colony with a laying worker, and he wishes to introduce a queen, all he has to do is to remove the old colony and place a hive on the old stand; then shake off all the bees from four frames (leaving the brood in the hive with the laying worker), and put them into the new hive on the old stand, then go to any hive and take out a frame of honey, bees and brood (the more bees the better), put the frame between the four frames, and then introduce the queen. As soon as the queen is laying, shake all the bees back. There is no use losing on account of a laying worker.

My honey crop is very light, on account of dry weather, I have 40 colonies of nice, yellow bees, and should have had lots of honey if the weather had been favorable. A. S. STRAW.

Edwardsburg, Mich., Sept. 26.

Dr. Howard and His Book.

I am much pleased that Dr. Howard has been appointed Professor of Bacteriology in the Medical Department of the Fort Worth University, as he will fill the place with credit to himself and his country. His book on "Foul Brood" is a credit to him. I mailed nearly 100 copies of it as presents to the best bee-keepers in Ontario, Canada. Many of those I sent his book to "had been through the mill" and had an experience with foul brood. I am sure that Dr. Howard would have been very much pleased if he had read the unlimited amount of praise of his book that I did in the letters I received from the bee-

keepers that I had mailed them to. Every bee-keeper that is in the business, or any person that ever intends going into bee-keeping, should buy Dr. Howard's book on "Foul Brood." The books are a credit to the AMERICAN BEE JOURNAL office, where they were published, as they show the good work that Mr. York and his staff can turn out.

WM. MCEVOY.

Woodburn, Ont., Canada, Sept. 20.

[Thanks, Bro. McEvoy, for your appreciation of our work on Dr. Howard's book on "Foul Brood." It *is* a valuable little work, as we have shown by the excellent testimonials by the best bee-keepers in the land. The Editor of *Gleanings* mentioned it in terms of highest praise at the time it first appeared—last April or May. We mail it for only 25 cents, or club it with the BEE JOURNAL for one year—both together for $1.15.—EDITOR.]

The American Bee Journal.

BY DAVID HILL.

This old BEE JOURNAL we have read for
twenty years and more,
And its teaching we have always found
to be,
What the progressive bee-man needs, who's
studying bee-lore
And the habits of the blithe and busy bee.

Like an old friend with genial face, and
kind, familiar way,
It comes to hand and makes more bright
the hours;
Or like a day of sunshine in the merry
month of May,
With the humming of the bees among the
flowers.

Long may it live, and may we all fraternally extend
A helping hand to speed it on its way,
That bigotry, and apicultural ignorance
may end,
In the clear dawning of a brighter day.

Warsaw, N. Y., Sept. 23.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Oolo.

CONNECTICUT.—The semi-annual convention of the Connecticut Bee-Keepers' Association will be held at the Capitol, at Hartford, on Wednesday, Oct. 31, 1894, at 10:30 a.m.
MRS. W. E. RILEY, Sec.
Waterbury, Conn.

CALIFORNIA.—The next regular meeting of the Central California Bee-Keepers' Association will be held on the first Wednesday in December, at Hanford, Calif. You are cordially invited to attend.
Lemoore, Calif. J. F. FLORY, Sec.

PENNSYLVANIA,—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

PENNSYLVANIA.—The Susquehanna County Bee-Keepers' Association will meet at the Tarbel House, in Montrose, Pa., on Thursday, Oct. 25, 1894, at 10 a.m. Officers for the coming year will be elected. All are cordially invited to meet with us at that time.
Harford, Pa. H. M. SEELEY, Sec.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

ILLINOIS.—The Illinois State Bee-Keepers' Association will meet at the State House in Springfield, on Tuesday and Wednesday, Nov. 13th and 14th, 1894. On account of the meeting of the National and State Granges at the same time and place, railroad rates of 1⅓ fares for the round trip are sure, if each person attending will not fail to get a certificate when he buys his ticket. The time has come when bee-keepers of the State, if they take proper steps, may obtain recognition in the experiment station. So let us have a full representation from all parts of the State, as well as from other States.
Bradfordton, Ill. JAS. A. STONE, Sec..

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See the second page of this number of the BEE JOURNAL for description and prices.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

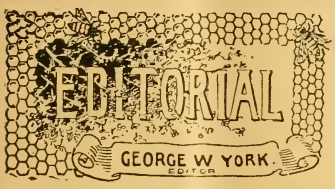
ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. | DEVOTED EXCLUSIVELY TO BEE-CULTURE. | Sample Copy Free.

VOL. XXXIV. CHICAGO, ILL., OCT. 25, 1894. NO. 17.



Dr. Miller spent two or three hours with us on Tuesday of last week, when on his way to Jacksonville, Ill., where he attended the State meeting of the Presbyterian Synod. With bee-writing and church and Sunday-school work, Dr. M. is kept exceedingly busy. He'll never rust out, that's sure.

Jacob F. Borger, and his brother Henry, both of Medina, O., dropped into our office on Tuesday, Oct. 9th. The former (Jacob) has been in the employ of Bro. A. I. Root for 14 years, having charge of the shipping department, and is a faithful and pushing young man.

Mr. Frank Benton, Secretary of the North American, went home from the St. Joseph convention with Mr. C. P. Dadant, of Hamilton, Ill., and remained until the following Monday. Mr. Benton reports having had "a very enjoyable visit with him (C. P.) and his father, as well as their families." He also found much interest in their comb foundation factory, etc. We can easily imagine what excellent entertainers the Dadants would be. Commend us to a Frenchman for genuine enjoyment, every time.

Mr. John H. Larrabee and Miss Edith Osband, of Lansing, Mich., are to be wedded Oct. 31st. They will be "at home" after Nov. 12th, at 813 Michigan Avenue, W., Lansing. Mr. L. has for a long time replied to Queries in the BEE JOURNAL, but is now succeeded by his brother, W. G. Larrabee, of Larrabee's Point, Vt., who is also President of the Vermont State Bee-Keepers' Association.

We wish Bro. John and his soon-to-be better half, long life, lots of happiness, and all sweetened with the purest honey of mutual love.

Mr. John Winn, of Richland Centre, Wis., called on us last week, on his return from Boston, where he had been on honey-business. His locality is the great basswood region, and this year a large crop of honey was taken. Messrs. Freeborn and Hatch, and Mrs. W. J. Pickard (mentioned on page 456), are all located at Richland Centre, and are extensive bee-keepers.

The Report Begun.—The proceedings of the recent North American convention at St. Joseph, Mo., is barely begun in this number of the BEE JOURNAL, owing to an unavoidable delay in receiving more of the report at this office. Next week we shall expect to make up for it, by giving a "big slice" of the convention loaf.

Half Worker and Half Queen.—Mr. N. Staininger, of Tipton, Iowa, has sent us a bee whose front part is worker, and back is queen. The colony from which it was taken has a good queen. It is a queer freak.

Mr. H. E. Heath, editor of the weekly *Nebraska Farmer*, Lincoln, Nebr., was at the St. Joseph meeting a portion of the time, after which he went on to Chicago. While here he called on us. Mr. Heath is a progressive farmer publisher, and is making an excellent paper for the country people of Nebraska. The subscription price is $1.25 a year. We can club it with the BEE JOURNAL—both together for one year for $1.75. This is certainly a liberal offer.

Mr. E. F. Beeler, of Berwick, Nova Scotia, has sent us a nice picture of his apiary of 56 colonies. Mr. Beeler is located about as far northeast as one can get, and still keep bees on this continent. His apiary shows that much care is given to it, and that its owner believes in neatness and attractiveness.

Mr. C. Theilmann, of Theilmanton, Minn., called on us just as we were about to start for the St. Joseph convention. He has about 300 colonies of bees, and is one of the best bee-keepers in Minnesota.

Mice in a Bee-House.—From an exchange the following was clipped by the *American Bee-Keeper*, telling how to destroy the mice that often infest bee-houses, etc.:

We do not believe in advocating cruelty to animals, but we are forced from last year's experience to advocate most strongly the use of any and every means to rid the hives from mice. It is very important indeed that this should be closely looked after—equal quantities of arsenic, white granulated sugar and flour mixed dry, put on little pieces of paper about the hives or apiary, where it can remain for some time without being exposed to dampness, is a very sure way of ridding the place of mice, yet in some instances where they can feed on bees in hives, they seem to care little for the poison.

Here is another plan we have adopted, which frequently gave us good satisfaction:

Take a tin pail half full of water, scatter a little wheat chaff on the top to make it look like a chaff bin. A board from two to four feet long, with one end on the floor, and the other on the side of the pail—in fact, better one on each side of the pail, then scatter a little bran, meal or flour, dust it lightly on the board. The mice will run up and look down upon the chaff where you have the meal scattered, they will jump down off the board on the chaff in the pail to get the meal, the chaff will sink around them, and the mice drown. We have caught five or six in a pail in one night in this way. We recollect once, in one of our out-apiaries, having several deer-mice and a chipmunk, which had gone into the bee-house from a neighboring wood about 20 rods away. They were so anxious to investigate the pail business that they got into it. Perhaps rats might be caught in the same way.

Prof. Cook writes us that the next California State bee-convention will be delayed until in February, 1895, as by that time abundant rains may have fallen, and thus will encourage bee-keepers, and cause a larger attendance at the meeting. Recently an inch of rain fell, which was a very rare thing for September in California, and all hope it will keep on.

None Paid Better. — Mr. C. D. Duvall, of Spencerville, Md., who advertises queens, etc., almost constantly in the AMERICAN BEE JOURNAL, wrote us on Oct. 8, 1894:

FRIEND YORK:—I have sold all the queens I have this fall. No paper has paid me better for advertising than the AMERICAN BEE JOURNAL. Yours truly,
C. D. DUVALL.

It pays to advertise regularly and constantly, in order to get the best results. Try it, you who have anything to sell to bee-keepers.

Fast Friends.—We want to thank those who have written such kind words about the BEE JOURNAL. We appreciate them greatly, and shall try hard to merit them. Here is a fair sample:

FRIEND YORK:—Find enclosed 25 cents to pay for three months' subscription for that friend of mine, the "old reliable" BEE JOURNAL. We are faster friends than I was aware of when I ordered you to stop its visits at my place every week. I have missed two copies since the first of the month; send them along, I do not want to miss a number. I tell you, I can see the benefits of its visits as I look back. When I take a paper devoted to bee-culture, I want bee-business. Your paper is the best complete bee-paper I ever saw or read.
Burns, Mich., Oct. 11. FRED CARD.

☞ "I think the BEE JOURNAL well and ably conducted, and no one, I think, would read it every week without drawing both profit and pleasure therefrom." — John Chrysostom, of Indiana, Sept. 28, 1894.

Convention Echoes.

To tell of all the good things on the generous "bill of fare" at the St. Joseph convention, week before last, would require a great deal of time and space. Thinking that a few paragraphs might be acceptable, we undertake the pleasant task, though we hardly know where to commence.

Beginning at Chicago, we may say first, that Dr. Miller, W. Z. Hutchinson, Dr. Peiro and "ye editor" formed a quartet that thoroughly enjoyed the meeting from start to finish. To us, one of the best parts of the whole convention was the conversational discussions "on board the train" to and from Saint Joseph.

Arriving in the "Saint-ed" city about 10:30 a.m., the first day of the convention, Oct. 10th, we were met at the station by E. F. Quigley, of Unionville, and F. H. Richardson, of Laclede—two typical Missourians. They kindly escorted us four tired travelers to the beautiful Commercial Club room, where the convention was to be held. Soon after having met the genial Pres. Abbott, and others who had arrived, the meeting was called to order. Much good work, we believe, during the sessions, was done. Among the important things was the revising and condensing of the constitution and by-laws.

We think the new President, R. F. Holtermann, has mistaken his calling. He should have been a lawyer, judging by the way he plead for Toronto as the next place of meeting. He was successful, too, against a whole "special car" of those determined Nebraskans. Oh, but didn't they make a strong pull for Lincoln? And how gracefully they "gave up" in favor of Toronto! But we'll expect to "pack our grip" for Lincoln in 1896. We heard some wonderfully nice things about that place, and now we are very anxious to see it.

Only a very few ladies were in attendance; but let us tell you that what they lacked in quantity they fully made up in quality! Now, there was Mrs. J. M. Null, of Miami, Mo. Why, she's a whole convention herself, though she is awfully quiet about it. Probably the next *Progressive Bee-Keeper* will be her "mouth-piece." We noticed she kept her pencil going very faithfully nearly all the time.

Then Mrs. Whitcomb, of Friend, Nebr., was there. It's queer, but Sister W. "talks through her fingers," and does it very emphatically, too. You should have seen the exquisite piece of beeswax-work she had made and brought with her. It was a "Musical Lyre," surrounded at the base with beautiful flowers—the whole thing made out of beeswax. It won a $10 prize at a certain fair this fall. It certainly was the slickest Lyre (not "liar") we ever saw. (Some other time we will tell what became of Mrs. W.'s "Musical Lyre.")

Mrs. Strawbridge, the pleasant President of a Kansas bee-keepers' association, was there. Also Mrs. Leighton, of Lincoln. Her son "took down" the proceedings in shorthand for Secretary Benton, so we may expect to have an excellent report. Mr. Leighton is a court reporter as well as a bee-keeper.

There were some other ladies present, among them Mrs. Abbott, the good wife of the President. You can tell her, if you wish, that we said she is the best cook in Missouri—surely, so far as we know. "The proof of the pudding is in the *eating*"—and that's how we can speak so positively about Mrs. Abbott's culinary accomplishments. If Missouri has any young ladies who will likely ever approach Mrs. Abbott in efficiency and capability in the housekeeping line, we'd advise our young gentlemen friends to seek their life partners in that portion of Uncle Sam's domain.

Besides being a practical farmer, teacher, preacher and bee-keeper, Pres. Abbott is a most able presiding officer. He keeps things moving, too. No danger of any one going to sleep in *his* audience! And what a worker he is! Why, he had St. Joseph plastered with big card-board notices of the meeting; he wrote several hundred letters to various agricultural papers about the convention, and was for a whole year planning and working for a good meeting. And best of all, *he succeeded*.

Dr. Miller, of course, made everybody happy with his songs and comic readings. But we believe *he* was happiest when in the midst of a general convention bee-talk—the result of an attack upon the question-box.

Dr. Peiro's occasional humorous suggestions in the midst of a heavy discussion were enjoyed by all. He knows how to make things lively and pleasant. He thoroughly enjoyed his first bee-convention. We hope it won't be his last.

Mr. Richardson, to whom we referred be-

fore, is just chock-full of bee-enthusiasm—and is a regular question-box himself. He believes in sticking to "bee-talk" from first to last. He wasn't alone in that idea, either.

Mayor Shepherd and ex-Mayor Hartwig welcomed the convention most heartily, the latter offering the free use of the elegant room of the Commercial Club. The city papers—the *Daily News*, *Herald* and *Gazette*—all extended every courtesy, and gave unlimited space to reports of the meeting. Some of the essays were published in full.

The Mayor generously invited the members to go with him to see a local Musee, on Thursday evening at 9 o'clock, and also to attend a miscellaneous entertainment afterward. The principal attraction in the Musee was a "talking seal." It seems its natural bark had been translated into the clear and unmistakable order—"Go out!" As we did not hear or see the seal, you can't prove it by us. The after performance, Bro. A. I. Root called a "Variety Show." He seemed to regret (?) having consented to go, but Dr. Miller afterward insisted that *his* morals hadn't been impaired in the least degree. Bro. Hutchinson and the writer went to the hotel, and to bed, like Christians (?), so neither of us know anything personally about the questionable character of the entertainment referred to. Bros. Holtermann and Calvert, it seems, left before the "show" was over, but we are inclined to think they did so to get a joke on Bro. Root and Dr. Miller! Probably we shall hear more of this joking matter later on. But evidently Bros. Holtermann and Calvert thought it best to follow the seal's advice, and "go out."

The St. Joseph convention was perhaps the most numerously edited of any of the North American meetings. Let's see, there were present, Leahy, Holtermann, Stilson, Root (A. I.), Hutchinson, and the writer. We believe the only bee-papers not thus represented were the *American Apiculturist* and *American Bee-Keeper*. It certainly was a pleasing sight (to us, at least) to see what brotherly feeling existed among all the bee-editors that were present. It's a good sign. May that "sign" never fail!

There are many other matters that we would like to refer to, but this is already too long. Perhaps at some future time we may mention them. Take it all in all, we believe it was one of the very best meetings the North American ever held. 'Twas not large in numbers, but for downright—and upright—good work, we believe it has not been excelled. We feel well repaid for all the efforts and expense involved in attending, and we never shall willingly be absent from a convention of the North American, so long as we are at all interested in bee-keeping.

'Tis "Matrimony Vine." — Mr. A. J. Duncan sent us a specimen plant to be named, and wrote thus concerning it:

I send enclosed a sprig of a shrub we call "Washington willow," which, I think, is ahead of anything I have ever seen as a honey-plant, not excepting basswood. The basswood, perhaps, is the best while it lasts, which is from a day or two to two weeks at farthest; this shrub commences blooming early in the season, and is in continuous blooming until killed by freezing weather. It is not affected by drouth or hot weather.

In an early day here there was planted perhaps a dozen or more in different parts of our little village, as an ornamental plant; they have been let grow and spread until there are considerable patches of it, and from morning until night, every day when bees can be out, they are just swarming on it. They were working on it yesterday, though all other flowers are killed by the frost.

I can't say as to the quality of the honey, but I think it is good. If I had an acre or two well set with it, I would feel sure of a good crop of honey every year.

A. J. DUNCAN.

Hartford, Iowa, Sept. 25.

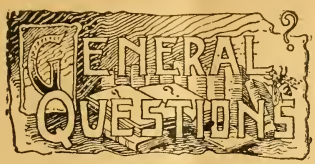
Prof. T. J. Burrill, to whom we forwarded the specimen from Mr. Duncan, says this of it:

This is matrimony vine, *Solanum jasaminoides*. It belongs to the same family in which are found the potato, tomato, egg-plant, etc., though it looks so different from these.

The shrub is very hardy, succeeds everywhere in our country, but I do not know that it has been recommended as a honey-plant, neither do I know anything about the value of the shrub as a honey-producer.

T. J. BURRILL.

Illinois Convention Reports.—The Illinois State Bee-Keepers' Association still have a good many copies of their Second Annual Report on hand, and no postage to send them out. Any one sending eight cents in stamps to pay postage and wrapping, will receive a copy of same by mail; or seven cents in stamps will pay for a copy of the First Annual Report, if any one desires it. Address, Jas. A. Stone, Sec., Bradfordton, Ill.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Keeping Brood-Combs with Honey.

I have 100 brood-combs partly filled with sealed honey and pollen. Can I keep them till next spring and then let the bees clean them out? Or will freezing make them unwholesome for bees? They are selected combs, the drone and crooked combs being used up. J. M.

ANSWER.—Freezing will not hurt them unless it be to candy the honey somewhat, and it will kill worms. Don't let mice get to them.

Sweet Clover on Pasture Lands.

What is the best time to sow sweet clover on pasture lands? F. M. P.
Freedom, Me.

ANSWER.—If you mean on freshly ploughed land, either spring or fall. If you mean to sow on the sod, in the fall; but you're not likely to get a catch unless the sod is well trodden by stock.

Very Late Swarming, Etc.

1. I am a new bee-keeper with only 5 colonies. I had no swarms during the summer; only one colony stored any surplus until fall, then two others stored about 10 pounds each, and on Sept. 29th one colony cast a large swarm, and in less than 10 hours it was freezing cold. The next day, of course, they could not fly, and I gave them three empty frames and some sugar syrup. They now have eggs. Will they be likely to live through the winter if I give them plenty of sugar syrup?

2. Will the old colony which has plenty of stores be O. K.? I might state that there are still some drones in the yard.

3. Did you ever know of a colony swarming so late in the season?

4. If I have not done the right thing with these bees, what shall I do?

5. Can bees rear brood when the nights are cool, or say when it freezes slightly at night? J. R. S.
State Line, Ind., Oct. 8.

ANSWERS.—1. Although it might have been better to have returned so late a swarm, still with plenty of stores it ought to go through all right. If you have the combs to spare, better give it two or three more.

2. I think the chances are in its favor, although there is a possibility of its becoming queenless.

3. I don't remember how late I have read about. I am sure I never had one myself anywhere near so late.

4. I don't know of anything to be done specially different from other cases, unless it be to supply combs and stores.

5. Yes.

Stone or Lumber for Bee-Cellar.

I am going to build a bee-cellar in a side hill. I have more stone than lumber. Would a stone wall, or rather, an arch, made of stone, do to keep bees in, or would it be too damp, as stone draws moisture? J. W. M.

ANSWER.—Some who have used lumber for such caves, have afterward used stone, as being more durable.

Slats in Section-Holders.

I have a theory on which I would like the opinion of an experienced bee-keeper. Some of my hives have slats for sections, but I have had no experience with them on account of the grasshoppers. Honey has been almost a failure for the last three years in this locality. I had thought that tin rests would give better results than slats, on account of being above the frames—nothing to hinder them coming up where they please. My theory is to get advantage of this, and also the cleanliness of the slat.

I thought during cold weather I would make what hives I need and put them away for the swarming season. I would make them ¼-inch deeper, and then cut the rabbet ¼-inch lower, and put a narrow peice ¼-inch thick across each end to prevent sagging. I will put one in

the center, then lay on the slats. If there are any burr-combs they will come under the slats, and not mark the sections. If there is any criticism to offer, I shall be pleased to hear it. W. C. A.
Wood's Cross, Utah.

ANSWER.—The point in question seems to be the desirability of having a middle support to keep the slats from sagging. I can hardly see that it could do any harm, bnt I've had very little experience with such slats, and that little has not made me dead in love with them. I should hesitate about making many hives on the plan mentioned, for you may want to change after trial. But now the matter is before the whole BEE JOURNAL family, and possibly some one can answer from experience. Do the slats in section-holders sag in an objectionable manner?

Alsike and Alfalfa.

Please name the difference between Alsike and alfalfa clover—the characteristics of both—as spoken of on page 335.
Decorah, Iowa. C. L.

ANWSER.—Alsike has a blossom much like white clover, but pinkish and larger. Grows much like red clover, but with smaller leaves and stalks. You cannot miss it if you look for something that appears like a cross between red and white clover.

Alfalfa grows more upright and makes a stronger growth, with a flower quite unlike the clover. I don't like to give a more minute description, for I might get into trouble, having never seen anything of it except the hay in winter in Colorado. Perhaps some one else will describe it.

Wintering in West Virginia.

Please tell me, as nearly as you can, how my bees should be protected through winter, or if they need any protection at all. They are in the Langstroth portico hive. Sometimes it is 23° below zero here. W. C. K.
Penbro, W. Va.

ANSWER.—Whilst there is a great diversity of opinion as to the matter of winter protection, I think there can be little doubt that certain kinds of protection are desirable. Generally the first question is whether bees should be wintered in the cellar or out-doors. In your locality I suspect they are better off out-doors, for 23° below is probably exceptional. Still, I'd rather take the opinion of one in your own locality who has tried both kinds of wintering.

Very likely the thing for you to do is to protect your bees against sweeping winds. Dense timber growing on the sides from which come the prevailing winds is perhaps the best thing. Lacking this, you can supply its place by planting, and for immediate protection you can put up a close fence. Plenty of corn-stalks packed closely around your hives will serve a good purpose, of course leaving entrances free. But some experienced West Virginian can tell you better than I.

A Feeding Scheme.

I have been thinking of trying the following scheme next season. What is your opinion of it? It is this: To set apart one colony for feeding early in the season, and confine the queen below by a queen-excluding honey-board, give drawn combs above, feed sugar syrup as fast as they will take it, removing combs as fast as capped over, and substituting fresh ones until I have enough combs of sugar syrup capped over to supply all colonies with winter stores; in the fall remove all honey and substitute syrup combs. This would do away with fall feeding, and give me all the honey stored and the bees, and, I believe, better stores. I might make the colony queenless and give bees from other colonies to keep up the strength, but by that plan get laying workers.

My crop this ye ar is 700 pounds of extracted honey f rom 21 colonies. No increase. F. H. R.
Laclede, Mo.

ANSWER.—Like many another thing, you can tell better about it after trying it with the bees. There may be some difficulty about getting the bees to store continuously from feeders. I shouldn't want to try it on too large a scale at first.

Good Honey-Sellers ought to be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Only a Cold!

How often we hear the term used, and with a degree of so perfect indifference that fairly appalls more thoughtful persons. The physician only too well recognizes the folly of so slight an estimate of what is usually called "a cold." Not that the primary effect of a disagreeable cold is, in itself, dangerous, but the results that may follow it is the end to be greatly feared. So long as a cold remains within certain bounds, it is only a matter of inconvenience and perhaps trifling suffering for a few days, at worst. But if neglected, or carelessly increased, may become the forerunner of most painful and fatal disease.

"Only a cold" is the usual beginning of a severe pleurisy or dangerous lung fever. "Only a cold" is often the first and certain step to that horrible torment—inflammatory rheumatism! Can any suffering be worse? And is a patient ever again free from tendency of recurrence after the first attack?

"Only a cold" has been responsible for various forms of kidney-trouble, of which Bright's disease is one, and incurable, so far as yet known.

Inflammation of bowels and stomach is another frequent result of a common cold, to say nothing of neuralgias, diarrheas, dysentery, sore throats, catarrhs, and many other difficulties, the results of colds. My object in stating facts so plainly is the hope of warning my readers, and thus, mayhap, be instrumental in warding off great suffering.

Now, when *I* have a cold I endeavor to take the best possible care of myself. I am free to acknowledge I may be a little cowardly about the matter, but after thirty years' pretty close observation of others' sufferings, largely through their want of knowledge or willfulness, I conclude best to use the judgment I have acquired, and take smallest chances to encourage pain or shorten my years. To this end I take the proper remedy in time—No. 1—contained in the BEE JOURNAL Family Medicine Case. Keep comparatively quiet, in a warm room; eat very lightly, drink all the hot water or hot milk I wish, cover up well in bed, and in 24 hours I come out all right, whereas, neglected a few days, I might be laid up for as many days suffering agonies!

The public have a general idea that doctors use some secret remedy to keep off disease and avoid contagion. Nothing of the kind. They simply use their knowledge of possible results, and are careful to avoid unnecessary exposure—advantages that any one may profit by, if equally painstaking.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 12.

(Continued from page 461.)

DIFFERENT RACES OF BEES AND THEIR HABITS.

I think it is about time I was telling about the different races, strains, etc., of bees kept in America.

BLACK OR NATIVE BEES.

I will take up the black or native bees first. These bees have been here since civilization began, as far as I know, and we could have made out with them if we had never gotten anything better. These bees will store honey almost as well as Italian bees during good seasons, and enter the supers readily, too, and sometimes it seems that they are too hasty to enter the supers and leave the brood-nest almost without honey, and have been known to starve and suffer just after the supers were removed, as they had all their honey above, and the supers came off at the close of the harvest, and the bees had no more chance to gather honey, and so perished.

These bees usually turn out whiter section honey than Italians, as they do

not quite fill the cells full, and the honey does not color the cappings.

Black bees are fearful robbers, and also become discouraged very easily when no honey is being stored. They are also poor soldiers, as they are more easily discouraged, and their sentinels driven from the entrances, and robbers can then walk in and help themselves. Last, but worst of all, they are more subject to moth-worms than other bees. And to close my remarks on native bees, I will advance my idea that they are a genuine wild bee. We have a wild and tame variety of a great many animals that very much resemble each other, and the black bees seem to want to pull right out to the woods as soon as possible after they swarm. Also, when their hives are opened they run as if they were scared almost to death. All these characteristics seem to prove to me that they are a wild variety of bees. The queens are usually prolific, and the bees hardy.

ITALIAN BEES.

This race of bees made its appearance in America about 40 years ago, by some of our most enthusiastic bee-fathers, but by whom it is hard to tell. But I would be very glad indeed to know just who it was, so that I could note it down for future generations, but I will leave it blank for the present.

The Italians are evidently our tame bees, or bees that have been worked and manipulated by the hand of man more or less since the world was created. I am told by some Italian history that 100 years ago, or less, there were no black bees in Italy. The truth of this I could not endorse, as the historian might have been mistaken.

Italian bees are somewhat larger than black bees, and always, almost without an exception, they leave honey in their brood-nests, and seem a little slower to enter the supers, but store very rapidly when once started in the sections. They are not so much disposed to swarm as blacks, and consequently usually a great deal stronger in bees, and of course gather more honey. They seem more gentle, adhering to their combs while being handled, and sometimes hang around the bee-yard or house longer than blacks, and giving every evidence of a tame variety of bees. They are not so readily disposed to rob, protect their hives against robbers and moths, and, I might say, against any intruder better than blacks. Having a tame disposition, they stay at home and fight to a finish, when the blacks get scared and run.

Comb honey stored by Italian bees is not so white as that stored by blacks, inasmuch as they usually fill the cells full, and the caps are placed right on the honey, as a little hole is left in the cappings, and they put in honey until it comes clear up to the cappings. Any way, the cappings are against the honey, which gives the comb the color of the liquid honey. But when this is once understood by consumers, they seem to like it all the better, as the rich, golden color looks well.

The Italians are harder to get off their combs at extracting time, or any other time. Being tame and gentle, they hold fast. The queens are large, and very prolific, and easy to find, as they seldom run down in the hives like blacks. I am satisfied they will go farther for honey, and carry larger loads, are more handsome than blacks, pay better, and, all in all, are a race of bees hard to "take down" when all things are considered.

GOLDEN OR 5-BANDED BEES.

This is an Italian bee also. I suppose that almost all old-time bee-keepers, as well as some younger ones, have noticed that the longer the Italians are kept pure, and bred in America, they get more yellow. This seems to be the case with people that come here from Africa —they get lighter after being domesticated. I began looking after this particular trait in the Italian bees in 1885, and for the last five years I have reared bees almost solid yellow, and no bands at all. These bees have about the same traits as the old Italians, except they are quicker to enter supers, and seem to delight in how much honey they can put into their hives. And swarming is not indulged in quite as much as with common Italians. This characteristic alone proves that they will be likely to store more honey per colony, all things being equal, for some bees are hard to keep together long enough to store a super of honey, and the non-swarming quality in the 5-banded bees is worthy of notice. But they will swarm, too, occasionally, and by an honest, fair, and impartial test I have found them, as a rule, more cross than common Italian bees.

But they are easily handled; and, Great Scott! what robbers they are! Whether their being so yellow makes them conspicuous or not, I don't know, but during a scarcity of honey the yellow "ladies" can be seen all over the apiary, and if the weak colonies do not

look out, it is good-bye. But this only proves them to be rustlers, and where the apiary is all 5-banded, they do not stand much show, as they are as good to defend as they are bad to rob.

After a five years' careful test, I am satisfied to hold on to my "Goldens," as well as to the old mossback or leather-colored Italians. They both suit me to a "t." If I were going to run an apiary for comb honey, give me 5-banded bees; if for extracted, common Italians. Either one of these strains of bees is good enough for the Joneses, and it is said they are the best people in the world. For beauty, the "Goldens" stand at the head, but for business I cannot find any improvement worth mentioning over the old three-banded Italians.

CARNIOLAN BEES.

This beautiful race of silver-gray bees I have given a thorough test the last two years, and their queens are the *most* prolific of any strain of bees I ever saw. They build up faster, and get ready for a honey-flow quicker than any bees I ever had. They are, as a rule, the most docile race of bees in America, or that is my opinion. Out of the six fine breeders, this year, only one produced bees that cannot be handled without smoke. They store white honey, or, like the blacks, do not quite fill the cells, which leaves their combs white.

They are not disposed to rob, nor do they let a robber in if there is any chance to keep her out. But I do believe that they are the worst swarmers of the whole business. They would swarm and re-swarm, and then rest awhile and swarm again. But they seem to know that they *must* stop long enough to fill their supers before frost, and *all* colonies that had a chance came out with well filled supers on the home stretch.

CYPRIAN—HOLY-LAND—ALBINO.

I have given the Cyprians, Holy-Lands and Albino bees a fair test. The Albino is too much on the sleepy order for me, and the Cyprians and Holy-Lands are too stingy to be used by most people, otherwise they are good bees, and I can produce fine honey crops with them.

Now, I have written out this history of the different races of bees, giving their characteristics just as experience has taught me, by actual practice right in the bee-yards, without the least bit of partiality on my part. While my experience along these lines may not be in accord with others, I mean to give my own experience pure and simple, for what it is worth, to my readers, and you may rest assured that I have given it as nearly right as I know how.

JENNIE ATCHLEY.

(To be continued.)

Uniting Bees in the Fall.

Query 945.—What is your favorite way of uniting bees in the fall?—Wisconsin.

My favorite way is not to unite them —EUGENE SECOR.

My experience along this line has no been very satisfactory.—J. M. HAMBAUGH.

I never unite any in the fall. We make all of our increase by division or artificial swarms, and never have weak ones in the fall.—E. FRANCE.

By filling one brood-box with the frames and all the bees of both swarms, and plenty of honey for winter, then smoke thoroughly.—W. G. LARRABEE.

Read a bee-book upon the subject. The space here at command is entirely too small to intelligently answer such questions as you ask.—W. M. BARNUM.

I seldom unite. I don't want them in that condition that they must be united. In many cases it is best to use a little sulphur and "unite the hives." —H. D. CUTTING.

I remove the poorest queen, use frames from both hives, and shake all the bees into the hive from which the poorest queen was taken. Before this I have moved the hives close together.—A. J. COOK.

Remove the poorest queen, if any difference; alternate frames from each to be united in a new hive, or a hive that neither of those to be united have occupied. When thoroughly mixed, smoke moderately.—S. I. FREEBORN.

My hives tier up nicely. I just set one colony on top of the other, quietly, on a cool evening, without arousing the

bees. They will become scented alike before mixing, and there is never any fighting, with me. If one queen is poor, kill her before uniting. If they are equally good, let the bees decide the matter.—B. TAYLOR.

Simply put the two together after it has become so cool that bees do not fly much. Lean a wide board over the entrance of the hive into which they are put. Sometimes it is best to smoke them thoroughly.—J. A. GREEN.

At a time when the weather is so cool that no bees are flying, I set one hive upon the other—of course first removing the bottom-board of the upper hive, and the cover of the lower one. In a few days the bees will usually unite without farther attention.—R. L. TAYLOR.

Shake two or more weak colonies together in an empty hive, close it up awhile, then give them their honey and brood, and the *best* queen of the lot, by introducing her by the candy plan. See that they have *plenty* of honey for the winter, and the job is over.—MRS. JENNIE ATCHLEY.

Either place the hive containing the weaker colony on the other, or remove enough frames from the one to put in the brood-nest of the other during a cool evening when they are not disposed to fly. Kill the poorer queen previously, so they may have but one queen.—DADANT & SON.

Set one hive on the other, allowing each colony its own entrance, with passage from one hive to the other only large enough for one or two bees at a time. This passage is to be enlarged in a day or two, or if heavy paper separates the hives, the bees will enlarge the passage.—C. C. MILLER.

Smoke well the bees to be united. Select the best frames of comb, and place them with the adhering bees alternately in the hive to receive them. Do this after sundown. If there is any choice of queens, cage the best. Better pinch the heads off the inferior ones before uniting.—J. P. H. BROWN.

Near night, when too cool for them to fly much, put the hives on a wheelbarrow and "trundle" them to where you wish the hive of the united colony to stand, smoking thoroughly before loading. In unloading, jar about much, and when the bees are filled with honey, say five to eight minutes from the time of smoking, unite as you wish. Remove all signs of "home" from the old stand, and no loss will occur.—G. M. DOOLITTLE.

Select the best queen; then take a frame of brood and bees alternately from each hive, and fill up the new one. Ordinarily golden-rod is being gathered, so no trouble arises from want of stores to gather. If no stores are being gathered at the time of uniting, I feed for a few days before and after the union. I don't have trouble in one case in a hundred.—J. E. POND.

I have not done very much uniting, so I can hardly say that I have a favorite way. By spraying the bees with sweetened water strongly scented with peppermint, they unite readily, either by alternating the combs, or by shaking the bees down together in front of the hive they are to occupy. If the hives are not side by side, the latter is the better way. If you put slices of onion in the hives, the bees will unite without trouble. I have tried this plan with entire success.—M. MAHIN.

First, I place the colonies that are to be united near together. Second, when they have marked their location, I remove part of the combs, leaving only those that I propose to put into the united colony, and remove the queen at the same time. The queen that I choose for the united colony, remains for the present. Third, I take a hive that belonged to neither of them, brush off the bees from the combs in front of it, which they enter and unite peaceably.—MRS. L. HARRISON.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

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Read our great offer on page 541.

PROCEEDINGS

OF THE

Twenty-Fifth Annual Meeting

OF THE

NORTH AMERICAN BEE-KEEPERS' ASSOCIATION.

BY FRANK BENTON, SEC.

The 25th Annual Convention of the North American Bee-Keepers' Association was called to order in the Commercial Club rooms, at St. Joseph, Mo., at 11 o'clock, a.m., by the President, Rev. E. T. Abbott, of St. Joseph, Mo.

After hearing the report of the Secretary, the following members were enrolled for the year 1894:

ANNUAL MEMBERS.

D. B. Abbott, Overbrook, Kans.
E. T. Abbott, St. Joseph, Mo.
L. L. Alspaugh, Auburn, Nebr.
N. Arnold, Burlingame, Kans.
A. Y. Baldwin, DeKalb, Ill.
H. G. Barber, Lincoln, Nebr.
D. E. Barker, St. Joseph, Mo.
Frank Benton, Washington, D. C.
Ralph Benton, Washington, D. C.
H. E. Bliss, West Winfield, N. Y.
J. W. Blodgett, Empire Prairie, Mo.
J. H. Brown, Rochester, N. Y.
E. L. Carrington, Maryville, Mo.
C. C. Clemons, Kansas City, Mo.
Dr. T. J. Conry, Florence, Kans.
W. H. Dancer, Lamoni, Iowa.
Chas. D. Duvall, Spencerville, Md.
Paul M. Francis, Mulberry, Mo.
B. Fredenburg, Johnson, Nebr.
E. B. Gladish, Higginsville, Mo.
Goold, Shapley, & Muir Co. (Lim.), Brantford, Ont.
E. Ford Gordon, Adams, Mo.
P. C. Gress, Atchison, Kans.
Hon. C. Grimm, Jefferson, Wis.
G. V. Hagaman, Brenner, Kans.
W. S. Hart, Hawk's Park, Fla.
H. E. Heath, Lincoln, Nebr.
O. L. Hershiser, Buffalo, N. Y.
R. H. Holmes, Shoreham, Vt.
Frank G. Hopkins, Jr., St. Joseph, Mo.
R. F. Holtermann, Brantford, Ont.
W. Z. Hutchinson, Flint, Mo.
Wm. James, Pleasant Hill, Nebr.
Geo. M. Kellogg, Pleasant Hill, Mo.
W. L. Kemp, Farmington, Pa.
T. Frank King, Landover, Md.
J. C. Knoll, Glenwood Park, Nebr.
C. F. Lane, Lexington, Mo.
E. C. L. Larch, Savannah, Mo.
Louis R. Leighton, Omaha, Nebr.
Mrs. Lydia T. Leighton, Omaha, Nebr.
R. B. Leahy, Higginsville, Mo.
M. H. Mandelbaum, Chicago, Ill.
H. Martin, Ashland, Mo.
J. R. Milne, Elm Grove, Mo.
Horace J. Newberry, Topeka, Kans.
H. C. Nichols, Amity, Mo.
C. E. Parks, Watertown, Wis.
Dr. F. L. Peiro, Chicago, Ill.
W. L. Porter, Denver, Colo.
E. F. Quigley, Unionville, Mo.
F. H. Richardson, Laclede, Mo.
T. J. Rimmer, Richmond, Mo.
G. W. Schock, Falls City, Nebr.
John Schumacher, Weston, Mo.
L. D. Stilson, York, Nebr.
Col. T. H. Strickler, Solomon City, Kans.
Hon. R. L. Taylor, Lapeer, Mich.
E. K. Terry, Burlingame, Kans.
C. F. Thomas, Dorchester, Nebr.
J. Van Deusen, Sprout Brook, N. Y.
J. T. Van Petten, Linn, Kans.
E. Whitcomb, Friend, Nebr.
John Wier, Carbondale, Kans.
Geo. W. York, Chicago, Ill.

LADY MEMBERS.

Mrs. E. T. Abbott, St. Joseph, Mo.
Mrs. Hiram Barker, St. Joseph, Mo.
Miss E. A. Conry, Florence, Kans.
Miss Mattie M. Florence, Adams, Mo.
Miss Nellie Florence, Adams, Mo.
Mrs. M. E. Fredenburg, Johnson, Nebr.
Mrs. H. H. Larch, Savannah, Mo.
Mrs. Lydia T. Leighton, Omaha, Nebr.
Mrs. J. R. Milne, Forbes' Station, Mo.
Mrs. Ella Nieble, St. Joseph, Mo.
Mrs. J. M. Null, Miami, Mo.
Mrs. E. M. Phelps, St. Joseph, Mo.
Mrs. S. E. Sherman, Salado, Tex.
Mrs. L. D. Stilson, York, Nebr.
Mrs. Thos. Strawbridge, Ottawa, Kans.
Mrs. E. Whitcomb, Friend, Nebr.
Miss Loulu Williams, Sedalia, Mo.

LIFE-MEMBERS PRESENT.

J. T. Calvert, Medina, Ohio.
C. P. Dadant, Hamilton, Ill.
Dr. C. C. Miller, Marengo, Ill.
A. I. Root, Medina, Ohio.

Reports as to the number of colonies owned by members, the yield of honey, etc., were then listened to, questions proposed by members were read, and discussion of them deferred until later. The convention then heard the following essay, by J. W. Rouse, of Mexico, Mo., which, in the absence of the writer, was read by the Secretary:

Profits in Bee-Keeping.

I will not attempt an estimate of all the profits to be obtained in keeping bees, but will refer merely to one phase of the question.

I take the position that it pays any fruit-grower to keep a few bees, even should no honey ever be obtained from them. Many bee-keepers do not advise others to undertake the keeping of bees, for the reason that so many beginners will not study up how to care for the bees nor attend to them properly, and so make failures. While this is true in many instances, so far as honey is concerned, there are also very many instances of failures in all avocations of life. The bees are very great aids in the proper fertilizing of fruit-blossoms, and while, in favorable seasons a few bees may accomplish much in a considerable territory, in an unfavorable season, such as a cool or wet time during fruit-bloom, it may be only those blossoms that are near where bees are kept that receive any benefit from the latter.

Trusting this is enough to open the discussion, I hope now to hear from others. J. W. ROUSE.

(Continued on page 560.)

Utah Bee-Keepers' Convention.

BY GEORGE E. DUDLEY.

The Utah Bee-Keepers' Association met on Oct. 4, 1894, in Salt Lake City.

George E. Dudley, of Provo, was chosen Secretary in place of Mr. John C. Swaner, resigned.

RAILROAD RATES ON HONEY.

A committee of three was appointed to confer with the proper officials of the various railways in regard to obtaining lower rates for the shipment of honey from this territory to Eastern markets. The following were selected as the committ: Mr. Scott, Mr. Reese and Mr. Dudley.

It appeared from the discussion that followed, that railway rates were much higher from Utah to Chicago and intermediate points than from California—to those States. Such discrimination by the railroads met the disapproval of the members, and steps were taken to place the matter before the proper authorities in order to get rates reduced.

A discussion followed relative to fixing the price of honey for the home market. Nothing definite was arrived at on this proposition.

THE WINTERING OF BEES.

Wintering of bees next claimed the attention of the convention. As much loss has been sustained in wintering colonies of bees in Utah, Mr. Scott, of Springville, was requested to give his method of wintering, as he has been successful in his home apiary. He said he uses the eight-frame Langstroth hives, and sets them side by side and close together on 2x4 inch strips of lumber. He packs the backs with sawdust, after having nailed boards along the back ends of the hives, about one inch from the hives, to receive it. He places an empty super upon each hive, and nearly fills it with leaves or sawdust, and puts the flat board hive-covers (which he uses) on the top of the super. Over all these he places a simple board roof that lies loosely upon the covers. By this means there is a light upward ventilation through each hive that carries off the dampness and keeps the bees dry and healthy, and prevents loss.

Interesting remarks were also made by George Hone, of Benjamin, and others, on the same subject.

An essay was received from Mr. Alex. D. Frazier, bee-inspector of Tooele county, which was read and ordered placed on file. This report gave the total number of colonies in Tooele county as 647, and the number of pounds of honey produced about 31,300.

President Lovesy, in a very able manner, spoke of the necessity of crowding the hives with bees by the time the honey-flow commences, in order to accomplish the best results.

The meeting adjourned to the usual time, next spring.

GEORGE E. DUDLEY, *Sec.*

Provo, Utah.

Profitable Bee-Keeping, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

Great Premium on page 544.

BEE-KEEPING IN CALIFORNIA.

BY W. A. PRYAL.

[Continued from page 502 of last week.]

Many Californian bee-keepers live at their bee-ranches only during the spring and summer months, when the bees require the most attention. During these months the hives are prepared for the reception of the crop that is expected to flow into them; the harvesting done, and after the colonies are found to be in a condition for the winter, they are then left to themselves while the owner goes to town to spend the balance of the year, or perhaps, he goes to look after some other property he owns. Some of these "bee-ranchers" have farms or orchards elsewhere that they can devote the remainder of the year to with profit. As a general rule, though, they live at their apiaries and cultivate a piece of ground in connection with their bee and honey interests. The wise bee-keeper looks towards being a landed proprietor; he secures a forty-acre lot or more. This he improves at the leisure, and almost before he knows it he has a little "Garden of Eden" about him. With a small stream of water he is enabled to work wonders in the warm canyons that are to be found almost everywhere in California.

I know a bee-keeper who came to this State some years ago for his health—he had lung troubles. Knowing that open-air exercise was the most beneficial thing for him, he sought and obtained work with a bee-keeper in Los Angeles county. He had no previous knowledge of the business; in a year or so he was so familiar with all the work about the apiary that he concluded to embark in the occupation himself the next year. He did so. He purchased a sufficient number of colonies to handle conveniently, and obtained a quarter section of land (at that time land was not as high-priced as it has since become in that county—neither was the climate sold as a regular commodity!) Our young friend cultivated a small portion of this land, so as to have all the vegetables he and his mother and brother required. His bees rolled in large quantities of beautiful honey, which he sold at a fair price. His health was by this time fully restored; he therefore branched out in business. More land was cleared and cultivated. It was ascertained that his neighborhood was a fine one for the successful cultivation of all kinds of fruits, except cherries. The settling of his vicinity, and the planting of fruit trees, seemed to have had the effect of causing the sumacs thereabouts to bloom at the same time the white sage was in bloom. The consequence was that the beautiful honey he previously obtained was no longer of that delightful transparent color that it used to be before the sumac bloomed at the same time as the sages. His honey was no longer as marketable as previously; he determined to abandon apiculture for this reason.

There are a few others who gave up their bees for the same reason. And yet

these abandoned bee-ranges are as prolific in honey as they ever were. To those who will be content to produce a dark-colored honey, these ranges offer a fine field for operation. There is no doubt that the time is not far distant when all kinds of honey, as long as it is of good flavor, will sell readily enough. And the difference in the price will not be so great as to make it an object for the producer to desire to produce white honey to the exclusion of the darker grades. The noise that the sugar-honey controversy made will have the effect in making consumers believe that all light-colored honeys are the product of the sugar manipulators. Of course, this will be a very erroneous belief, but it will work to the benefit of the man whose bees have a "dark" honey range to work upon. Verily, "it is an ill wind that does not blow somebody good." But, I am digressing.

Some of California's old-time apiarists have become fruit-growers of no mean order. To cite instances, I will name first the man who, perhaps of all others, did more to make the State famous as a great honey-producing garden—J. S. Harbison. Then there is Mr. Corey, Mr. Touchton, Mr. Bliss, and, I believe Mr. Wilkins, and a number of others. Now, strange to say, none of these men file serious indictments against the bees being the worst kind of fruit robbers. Experience has taught them that, though the bee may help itself to all the loose fruit-juice it may find, it does not maliciously and burglariously break into the fruit and steal the contents thereof. It is the fruit-grower pure and simple who makes this broad and unjustifiable charge.

The senior editor of *Gleanings*, who made two trips to this State, and who wrote up these trips in an interesting manner for his periodical, made some statements about the country which were a little "off color." I am sure he made these mistakes unknowingly. Often a traveler will get things a little tangled up in his notes. This is nothing uncommon with newspaper reporters, and is the reason some people say they never believe what they see in a newspaper. It will not be my purpose to try and set Mr. Root right; in fact, I did not keep track of his writings, and I am sure that at this time I am unable, without re-reading said articles, to tell just where he did misstate things. I remember one thing, however, which seemed too funny to me to forget in a hurry. It was something he said about the kind of hay we raise; about it looking so much like straw. I am afraid some of those "stray straws" from Dr. Miller's hay (?) stack must have become raveled in my good friend's brain. The Doctor would do well to keep those straws of his under control.

I don't know where Mr. Root saw that "hay-straw," but it could not have been up this way; and, from what I saw in my southern travels, I am sure they are not engaged in raising bamboo for fodder for their horses. True, we don't raise timothy, but we do raise a hay that gives us the fastest horses in the world. A hay that will produce such horse-flesh it not to be laughed at. Surely, somebody must have imposed upon the sage of Medina.

A word about our hay. It is as easy to raise as grain. In fact, it is cut out of the same field; the difference is that the hay is cut before the seed of the oats or wheat has got well into the "dough" state. When it is passing from the milk into the more advanced state, it is ready to cut. It is not left to dry up in the field, but raked up after the mower and left in winrows for a day, when it is cocked up, as we call it. Then in a week or so, it is stacked up and let cure for a couple or more weeks, when it is pressed and is ready for market. Some growers do not stack it, but haul it directly to the press. When this sort of hay is properly cured, it looks anything but like straw. Grain sown for hay is scattered thicker than that for grain; the consequence is that it comes up finer, and is not so rank. This hay is sold at about $12 per ton. The price varies with the conditions of the season. When we have had a sufficient rainfall the price is reasonable; when the season is

a dry one the price is as high as $15 or $20 a ton. These conditions also regulate the wheat and other produce markets.

Much of the truck gardening is carried on by Italian and Chinese gardeners. The islands in the Sacramento and San Joaquin rivers offer splendid opportunities for truck gardening, as there is plenty of water always handy, and the soil is of the richest nature. Even here the Chinese have large gardens, and ship largely to the San Francisco markets. Such a thing as a dry year is unknown on these islands. The only thing that the occupants dread is a flood, which is occasioned by the overflow of the river, or the breaking of the levees. Some of these islands were flooded by the excessive rains that visited this State last year.

There are some apiaries along the rivers named in the last paragraph. The average honey crop is good, though the honey is not as light-colored as that obtained on high ground. The comb honey stored by the common bees on the islands is sufficiently light to command about the same price in the market as the clear honey from the southern part of the State. It has not the high flavor that the sage honey has, and in other ways it is not as good. However, the islands, or rather the banks of the rivers, in the central portion of the State, are not bad places to establish an apiary, all things considered.

ANSWERS TO CERTAIN CORRESPONDENTS.

No, don't come to California unless you have several hundred dollars with you, and expect to make a fortune from the time you set your foot on the soil. It is as hard to make a fortune here as it is in any other part of the world. Californians earn their living by the sweat of their brows.

Numerous styles of frames are in use here. The one that is most preferred is the Langstroth. Any sort of a hive will do, so long as it is not too small. Small hives are a nuisance, as the bees in them will throw off too many swarms.

Mostly extracted honey is now produced. This is mainly owing, I believe, to the fact that it is easier to ship. The freight rates are lower on it, and it is easier to handle.

Second-hand coal-oil cans that have been thoroughly cleansed, are used mostly for shipping honey. Some producers use new cans, but the majority use the old cans. I have heard that it is getting to be a hard task to get second-hand cans any more, for the reason that the importers of coal-oil are buying up all the old cans to refill.

No, most emphatically, don't wait to get married in the East before you come out here. This State is full of as charming ladies as are to be found anywhere, and who are looking for the right man* to put in an appearance. Perhaps you are that gentleman. You may be sure that the aforesaid ladies want you to come out here and make your matrimonial intentions known.

When you have lived in the State a year, you won't want to leave it. It is worthy of remark that anyone who has resided here for any length of time will never go elsewhere to live. Those who have tried to do it have surely come back.

North Temescal, Calif.

[*It must be that Bro. Pryal isn't quite the "right man," for we believe he has not as yet surrendered to any "charming lady." And how about Rambler? He must be the wrong man, too.—EDITOR.]

A KIND OF MIGRATORY BEE-KEEPING.

BY JOHN CRAYCRAFT.

The subject of shipping bees to the North for the honey crop has been thought over a great deal for several years. I had several long conversations on this subject

with Dr. N. P. Allen, of Smith's Grove, Ky., some twelve years ago. I had about forgotten the subject until I read Mr. McArthur's article on page 305. I wrote Mr. MArthur a letter in regard to his shipping his bees to the South instead of killing them, and then buying in the spring. I made the suggestion to him about as follows:

That on or about the first of September to prepare his bees thus: Extract all honey except some 10 pounds per colony; fill the hives with the best strong combs, with a small amount of brood—not more than one frame full per colony (in several frames), and about one quart of young bees and a queen. To ship them South, to Florida, and come with them and care for them, and get a crop of orange honey in March. Breed his bees up full in April, and ship them home by May 1st, or at such time as suited. Or arrange with some practical, experienced bee-keeper here who could receive them, care for them, get a crop of orange honey, and have what increase was made by swarming; all that swarmed having young laying queens return to him, others with such queens as were sent, if living.

I feel sure if the railroad charges were not exorbitant, it could be made profitable to both parties, if all were conducted in good faith and honorably. I know that they could be returned full of bees and brood, ready for harvest in store for them.

In shipping them from the North to winter here, it might be better to leave more honey in the hives than I suggested (10 pounds) some seasons, as our fall honey along the St. John's River is not very certain. They would not get much until the maple and willow came in, which is about Jan. 1st. Some years it is a little earlier. Orange commences blooming usually about Feb. 20th, and lasts until about April 1st, so that bees on Christmas, having plenty of honey and two quarts of bees, can be made full of bees and brood, and ready for the orange crop the last of February, although more bees and brood to start with would be better.

I commenced the first of last March to build a new apiary. I had 20 fair to good colonies to start with. I made 112 new cypress hives for 10 short or crosswise Langstroth frames, which I prefer. I have now 110 good colonies on 10 frames each, got 170 gallons of honey, 200 pounds of comb honey, and my bees are gathering honey from golden-rod and motherwort. I will move my bees to the orange groves this winter for orange-blossom honey.

I hope some bee-keepers in the North will make a trial of moving their bees to the South to winter, and gather a crop of orange honey, then move them North for the clover and basswood honey.

I would be pleased to correspond with bee-keepers who might think of embarking in this kind of migratory bee-keeping.

Astor Park, Lake Co., Fla., Oct. 1.

LINDEN OR BASSWOOD HONEY DEFENDED.

BY C. THEILMANN.

On page 212 is an article written by Chas. F. Muth, on "The Best Honeys of the World," wherein he gives the preference to the different kinds, namely: White clover, mangrove and California sage. All other honeys go to manufacturers, principally, almost exclusively.

Mr. Muth has advanced similar ideas heretofore, and it is time to put in a protest against such misleading ideas, at least as far as linden or basswood compared with sage honey is concerned, for table use. It would surely be better judgment in putting *Northern* linden honey at the head of the list, and sage honey for manufacturers. There is no whiter honey than Northern linden. There is no honey that is

more crisp than linden. There is no honey that seems to have the same medical properties for lung and chest troubles as has linden, and there is no honey that has that peculiarly fine aroma and flavor that linden has to Northern people. There is no honey that sells for more in the markets from Portland, Oreg., to Philadelphia, Pa., except probably at Cincinnati, where Mr. Muth has been educating people to use sage honey.

A great portion of the linden honey does not get credit due itself, and is sold as clover honey, and thereby clover gets the credit which belongs to linden. To prove this, I will give only one of the many instances that came under my observation.

Sometime in August I went to Minneapolis to sell my linden honey (I had no other). The first question I was asked there by the honey-dealer was: "Is your honey white? Is it clover?" I told him it was white, and there wasn't a drop of clover in it. That it was all linden. "Well," he said, "send me 500 pounds of it, so I can see what it is."

I did so, and after the arrival of the honey there, I got a letter to send him all the clover honey I had. I told him again that it was linden honey, but his reply was, "Send it along."

About a week after I had sent him my honey, I went to our State Fair, and gave my customer a call, and there my linden honey went off like hot-cakes for "clover honey," and since then I have received a number of letters from those that bought some of that honey, asking me if I had any more of the "clover" honey I sent to Minneapolis! Hereby the readers can see that clover gets credit which belongs to linden!

I could give many more cases on this question, but this will be enough. By the way, I got two 1st and one 2nd premium at our State Fair, on a lot of linden honey, amounting to $30.

Now, what is California sage honey? It is nearly as white as Northern linden, but the eye gets the most good of it, as it is gummy, with no particular flavor, except of alkali and sage-brush. Whenever I taste any of it, it reminds me of the same strong smell, only in a less degree, which was so offensive to me when I traveled through alkali and sage-brush some years ago on the Pacific coast. I never tasted any other honey that is as flat as is sage honey—just like it is with some of the California fruits compared with our Michigan fruits. Many of the people are beginning to know the difference. The other day I wanted to get a crate of Eastern peaches at St. Paul to take home with me. (It was towards evening). But I could not find any in the city. A number of carloads came in that morning, but were all sold, while there were many thousands of crates of California peaches waiting for buyers at low prices. It is the same way with honey. My linden honey always sells from one to two cents higher than does California sage.

It seems that Mr. Muth had the blues over the honey market, when he wrote that article, as near the end of it he condemned all honeys—clover and all—to manufacturers.

Theilmanton, Minn., Sept. 25.

THE NORTH AMERICAN—OTHER NOTES.

BY MRS. B. J. LIVINGSTON.

Now let us get our faces fixed to hear all the good things from St. Jo. We hope every one will emulate that character in "The Hoosier Schoolmaster," who had been "to Bosting." Early and late, tell us what you did, heard and saw when you were "to" St. Jo.

Now please don't have two conventions yearly. Have pity on those who don't wish to feel so badly twice a year because they can't go.

DOES SHE EVER REST ?—On page 469 Dr. Miller said the very things to Mrs. Atchley that I wanted to say. Is there no end to the responsibility that that woman is willing to shoulder ? Do you suppose she ever sits down in a sleepy hollow of a rocking chair, and, folding her arms, lets go of things for ten minutes ? I doubt it.

Mrs. Atchley, when do you rest ? Tell us, please.

NOT HONEY-DEW.—Mr. Taylor, in *Farm, Stock and Home*, suggests the possibility of our light fall honey being honey-dew. The drouth in this State threatened our bees with starvation until after the first of August. The basswood here was minus, for some reason, for I had sections with drawn comb on all my strongest colonies, and I did not get a pound of sealed honey from that source. However, the bees are in good condition for winter, and late in the season they stored from 30 to 50 pounds of surplus, per colony. The drouth that has troubled us for two years has dried out the sloughs, and developed some honey-plant that is new to us. We have traced the bees to our big sloughs, but have not found one plant. It cannot be honey-dew—it is too fine a honey—flavored like the asters.

THOSE "OTHER THINGS."—Edwin Bevins, shake hands! I, too, have found those "other things" (see page 473) connected with bee-keeping, and have all too little time to do "what I love to do so well."

Centre Chain, Minn., Oct. 12.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees Doing Well.

Some of my bees are doing well. I have 15 colonies. One swarm issued on August 10th, and it is doing well.

D. H. PAYNE.

Caddo Mills, Tex., Oct. 11.

Two Meetings a Year.

I read the suggestion about "Semi-Annual Meetings" of the N. A. B.-K. A. with delight, and with some regret. I was pleased to see that two such meetings were advocated by the editor, and that he took Maine and Canada, on the east, and Texas and California on the west, and named times of such meetings as the first of October for the West, and for the East in April. I regret that he failed to give any recognition to all the Southern country lying east of the Mississippi river and south of the Ohio river.

He says that the membership will remain largely local. Having all of its meetings in the North will always keep it so. I know that there are a great many Southern bee-keepers who to-day would be members if they could entertain the hope of meeting with the fraternity of bee-keepers.

I will not complain further, but will make a few suggestions: In the event that through the great wisdom of the members they have two meetings yearly, that they decide them North and South instead of East and West. Starting with one about March 10th, say in California, in 1895; then in October, in the East, for Maine and Canada; in Florida in March, 1896; then back into the central North, say Ohio, in October, 1896; back South to Texas in March, 1897; and then back to the present vicinity in October, 1897. Thus making the meetings every third year within the territory named. This would make it National, and would add greatly to its membership; it would give members in the South an opportunity of meeting with its members, for the meetings in California at that season would be better for the cold Northern members to attend the same in Texas, and especially so in Florida, where many of the Northern and Eastern members would delight in meeting, and enjoy hearing

the busy hum of bees on the orange bloom in March, while their cherished workers were wrapped up in ice and snow in the North.

"Brethern and sisters, what do you think of our suggestion."

Astor Park, Fla. JOHN CRAYCRAFT.

[We stand corrected, Friend Craycraft. Certainly, the South is entitled to its turn in having a meeting of the North American within its borders. We should like to see it go to our Sunny Southland sometimes. Doubtless it will. —EDITOR.]

Central Iowa Convention.

The Central Iowa Bee-Keepers Association met at Oskaloosa on Oct. 5th and 6th. The attendance was light, but an interesting meeting was had. The discussions were full and instructive. The next meeting will be held at Oskaloosa, in December, 1895. The officers for the following year are as follows: President, T. C. Mendenhall, of Oskaloosa; Vice Presidents, Hon. Hardin Tice, of Oskaloosa, T. J. Howard, of Cedar, and G. W. Rhine, of Taintor; Secretary and Treasurer, W. E. Bryan, of New Sharon. The meeting in 1895 should be well attended, as this should be the best bee-keepers' association in Iowa. W. E. BRYAN, *Sec.*

New Sharon, Iowa.

Varieties of Golden-Rod, Etc.

I will send you with this three or four stalks of golden-rod of different varities. One has a large bushy, top, grows from three to four feet high, and is worthless as a honey-plant. Another kind that somewhat resembles corn-tassel, I think, is also worthless for bees, so far as I have seen. But then there are two other kinds that are good, as I have frequently seen bees working on them. One is a square top, about two feet high, with a reddish looking stem, and deep yellow flowers. The other kind—the best of all for bees or honey—is a small kind, and grows from one to two feet high, with reddish purple stem, and spire or cone-shaped top, with bright yellow flowers. I have watched this plant quite closely this fall, and I never saw bees working on anything better. The trouble is, there are not enough of them.

I would say for the benefit of H. H. H., on page 458, get of this last-named variety, if he thinks of planting golden-rod.

I have been a reader of the AMERICAN BEE JOURNAL for nine or ten years. I have had my ups and downs with bees, and some experiences not worth while to mention here. I started last spring with 60 colonies, and worked them for comb honey, but got only a little surplus honey—about 400 pounds in all, but they are in good condition for winter quarters, with plenty of basswood honey to last them until spring.

My apiary is located about two miles north of the Iowa river, and about one mile from the nearest basswood trees—a little too much to one side of the basswood for best results in times when it is yielding nectar, which it did this year to perfection, or at least it bloomed well, and lasted for fully two weeks, but our bees were in poor condition to gather the nectar—too weak in numbers.

Ackley, Iowa, Oct. 15. N. YOUNG.

[Friend Young, the specimens of golden-rod came all right. Thank you. We are quite sure that several of the varieties you sent do not grow around Chicago. The only kind we have noticed here is the one with a bunch of bloom at the top.—EDITOR.]

In Good Condition for Winter.

I took from the cellar 22 colonies of bees on March 24, 1894, having lost only two colonies by uniting in the cellar. They did well up to June 1st, when the drouth, which lasted until Sept. 1st, shut them off so that they gathered a small amount of surplus. Of light honey I got 370 pounds, and of dark 330, or 700 pounds in all; but my bees (30 colonies, including increase) are in good condition for winter, with plenty of stores. My honey was all in one-pound sections.

AUSTIN REYNOLDS.

Cataract, Wis., Oct. 8.

Second Year's Experience.

We are very much inserested in bees, have read the BEE JOURNAL one year, and think we cannot do without it. This is our second year. We started with seven colonies, and only increased to 10 the first season. The past season we increased to 26. We lost a part of one swarm. They were going to the woods as fast as they could go. They had only been hived about one hour when we saw

them leaving. They never stopped to cluster. My husband shot among them, and about half came back, but without the queen. We gave them eggs from another hive, and they are a good, strong colony now. We have averaged 110 pounds per colony, spring count, with 300 pounds left unsealed.

OLIVE ARTMAN.

Artman, Colo., Oct. 13.

Honey from Golden-Rod.

I notice in this week's BEE JOURNAL that H. H. H. would like to know the kind of golden-rod which the bees get honey from. We have a good many kinds of golden-rod here, but there is only one kind that bees work on. The golden-rod with the flat top is the kind. I have had bees gain 11½ pounds a day on golden-rod. It lasts about two weeks.

If you want the seed, I can furnish it.

GEO. W. NANCE.

Anthon, Iowa, Oct. 13.

One of the Asters.

I send a blossom of a plant which grows in great abundance in this neighborhood. The bees work on it more than any other flower. I would like to know the name of it.

Agency, Iowa. D. S. FARNSWORTH.

[This is *Aster lævis*. It seems to have attracted considerable attention recently from the numbers of bees found upon it; still there is a question as to whether they are getting much nectar. The bees certainly gather pollen from the plant in considerable quantities.—T. J. BURRILL.]

Another Apicultural "Don't.

Now and then the bee-papers come out with a string of apicultural "Donts." I want to be allowed to add one more to the string, though it may be that it has appeared before. I want to say to beginners in bee-keeping, don't presume too much on the good nature of your bees.

I have a lively recollection of the consequences, once upon a time, of overconfidence on the part of the writer. I had been working along through the early part of the season without the use of much smoke, and so I got careless about having the smoker in good working order every time I opened a hive. One hot day, a year ago last summer, I fired up, and went out about noon to remove a case of sections from the hive. I smoked a little at the entrance and set the smoker down, and then pried up the end of the section-case. The bees began to come out pretty lively, and I caught up the smoker to check their advance but the smoker would not work, and their advance was not checked. There was a hole in the knee of my overalls about as big as the palm of my hand, and my knee was just on a level with the opening I had made between the hive and super. The reader can imagine what followed. I beat a retreat for the time being, but soon returned and got that case of sections.

Persons having the rheumatism and wanting to apply the bee-sting remedy, can possibly get some good suggestions from the above experience. They will see at once how easy it is to get the remedy applied right on the exact locality of the disease. EDWIN BEVINS.

Leon, Iowa.

Bees Did Splendidly.

I began last spring with 7 colonies, six in good condition and one very poor. Bees did splendidly for this year. I had an average of about 40 pounds per colony, and 4 swarms. My bees are in the Langstroth frame hives. The bees in this vicinity are all in box hives, or in Root hives, but their owners never see the inside of a hive from one year's end to the next, yet they know (!) all about bees, and say, "You tinker with your bees too much!" Why cannot we have a bee-inspector? I tell you, their hives are foul-brood traps! FRED CARD.

Burns, Mich., Oct. 11.

[Friend Card, you probably wil have to get a foul brood law in your State, and then bee-inspectors will be appointed to see that the law is enforced. —EDITOR.]

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

Have You Read page 515 yet?

ESTABLISHED IN 1861

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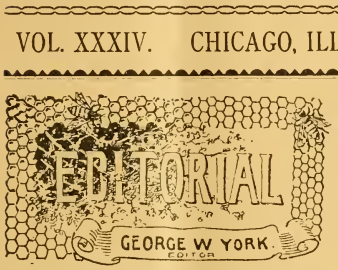

"**It is Not Much** the world can give,
With all its subtle art;
And gold and gems are not the things
To satisfy the heart;
But oh, if those who cluster round
The altar and the hearth,
Have gentle words and loving smiles,
How beautiful is earth!"

Mr. H. Reepen, of Germany, we are sorry to hear, has been suffering from several attacks of "la grippe." His health is improving, however, and he hopes soon to be all right again. Mr. Reepen, it will be remembered, wrote some interesting notes on bee-doings in Germany, for the "American Bee Journal" last year. He keeps close track of bee-matters in "the fatherland."

Those New Subscribers, that you have long been thinking of getting, are very likely ready now to give you their names. You know that besides "throwing in" the numbers for the rest of this year to new subscribers for 1895, we also give each one of them a free copy of the 160-page book, "Bees and Honey." Yes, and we will give you a premium for getting the new subscribers, as you will see on page 546. Better at once "get after" those bee-keeping friends of yours, and secure their subscriptions, so you can send it with your own renewal before the end of December. To double the present list of readers of the "American Bee Journal" will mean more than a doubly better paper for all. We can guarantee that. If each subscriber sends only one new name, the thing will be done. Will YOU do it?

Mr. Alfred H. Newman, of Cedar Rapids, Iowa, gave us a pleasant call last Saturday. The majority of our readers will remember him well as the efficient business manager of the "American Bee Journal" for so many years when his father, Thomas G. Newman, was its editor. Mr. Alfred H. Newman is now the Secretary and Treasurer of the Cedar Rapids Candy Company—a large concern that manufactures candy on an extensive scale, and at present employing some 30 persons, seven of which are kept constantly on the road as salesmen for the firm. It's a "sweet" business, especially as extracted honey is used to a certain extent in making some their candies.

The Convention Report, on account of the sickness of Mr. Lighton, the short-hand reporter, has been delayed in reaching us. We had hoped to publish a "big slice" of it in this number, but we can now safely promise that after this week we can place it all before our readers in rapid and satisfactory manner.

Though we had not the regular report of the proceedings to publish this week, we are not entirely "left in the cold," for on page 560 of this number of the "American

Bee Journal," will be found a kind of "epitome" of the St. Joseph convention, by Bro. Hutchinson, together with suggestions and comments that cannot help being interesting to all. We asked Bro. H. to write up his impressions of the meeting for the "American Bee Journal," and what you find in this number from his pen is the happy result. We think it is one of his best productions, as everything is told in such a captivating way.

Next week, besides a large part of the regular proceedings that we will be able to place before you, we will publish some more "Convention Echoes," which have been sent us by an interested member of the convention. The "Echoes" we refer to here, will doubtless cause "echoes" of laughter to be heard by the one who reads them, as they are told in a mirthful way.

We are going to heed Sister Livingston's request on page 535, viz.: "Early and late, tell us what you did, heard and saw when you were 'to' St. Jo."

Bro. Ernest R. Root has been quite sick with "la grippe," we regret very much to learn. Also his little 3-year-old son, Leland, is just recovering from an attack of congestion of the lungs. On his return from the St. Joseph convention, Bro. Calvert writes us, he found Ernest R. confined to the house with that "grippy" disease. We are very glad to know that both E. R. and Leland are now (Oct. 24th) on the way to health again. By the time this is before our readers, we hope the two sick ones may be fully recovered.

A Midwinter Bee-Meeting.—Mrs. Atchley is a regular steam-engine. She's now working up a big bee-meeting, to be held at Beeville, Tex., on Dec. 27th and 28th. Here's her letter about it:

DEAR BRO. YORK:—After writing a number of prominent bee-keepers of Texas, and receiving great encouragement about a midwinter bee-meeting, I have decided to call a meeting at Beeville, Tex., on Thursday and Friday, Dec. 27th and 28th. Tell all to come and see our beautiful "Sunny Southland" country, and let's have a good time.

The meeting will be at my house, or apiary, 2½ milles north of Beeville. No hotel bills. Free hacks from the depot to the place of meeting. All that will come, please drop a card to Jennie Atchley, Beeville, Bee Co., Tex., and *special* arrangements will be made for you. *All* railroads will give half fare.

Set to work right now, and let's see how many will be here. And bring all your bee-keepers with you—wives, daughters, etc. Yours truly,

JENNIE ATCHLEY.

Now we think that's just splendid! We don't see why Mrs. Atchley shouldn't be able, with the help of other Texas bee-folks, to get up a bigger convention than the one held at St. Joseph, Mo., a few weeks ago. Everybody in the South should begin to plan now so as to be able to go. It will pay you grandly! You never will get a better chance to attend a big bee-meeting so cheaply. Half fare on the railroads, and no hotel bills! What more do you want? Why, if it did not come in our very busy time of the year here in the "American Bee Journal" office, *we* would be greatly tempted to be there, too.

We do hope that Texas bee-keepers, and those from adjoining States, will just overwhelm Mrs. Atchley—just "swarm" there in such numbers that the good Beeville folks will have their "hives" crowded for two days! We understand that the people of Beeville are going to help Mrs. Atchley entertain. That's the way to do it. Now let everybody be there, who can possibly do so, and help make it a rival of the late North American Bee-Keepers' convention!

The Convention Photograph mentioned by Bro. Hutchinson in his "Notes" on page 565, is a splendid one. In fact, it is the finest group picture we have seen in a long time. Surely, every member of the St. Joseph convention will want it, and everybody else ought to have it. We are very certain A. I. Root never before looked as happy and "pleased" as he does in this picture. Dr. Peiro looks "perfectly natural," and Mrs. Strawbridge—well, "perfectly lovely" expresses it. All are *good*. Better send 75 cents for a copy, to W. Z. Hutchinson, Flint, Mich.

Bro. E. F. Quigley was unintentionally omitted from the list of editors given by us on page 522, as having been present at the St. Joseph convention. He is the associate editor of the "Progressive," and of course stands in the row of "seven editors" in the convention photograph referred to above.

Softened Feelings need not always, or at any time, be "soft feelings." Bro. Hutchinson refers to something of the kind in his comments about the St. Joseph convention, on page 563. He truthfully says:

We are a band of brothers; but sometimes some of us get to feeling a little edgewise towards some of the brethren. We think there is good reason for it, and perhaps there is; but when we meet the offender face to face, take him by the hand, sit by his side and see an honest soul shining out of his eyes, we find our enmity melting away. It would not surprise me if several people went away from St. Joseph with a better opinion of somebody else than they had when they came. For this alone, the meeting is worth all it cost.

We want to say that we think Bro. Hutchinson is just right in the above. When we all sang together that very appropriate closing song, "Blest be the Tie," we thought we could almost imagine an occasional tear on some of the faces. *We* certainly felt it was indeed "good to be there," and sad to "asunder part."

Yes, Bro. H. has expressed it exactly, in the above paragraph. We can recall several people that we met at the convention, for whom we shall hereafter have a higher esteem. Indeed, the "social part of a convention" is a *mighty big part!*

Mr. and Mrs. L. P. Smith, and little son Leonard, who are bee-keepers in Jewell, Kans., have been visiting Beeville, Tex., where Mrs. Atchley lives. They are seeking out a home in that part of "Sunny Southland." We hope they may be entirely successful and satisfied.

The New Percolator Feeders.—On page 437 we reprinted Dr. Miller's description of "Feeding Simplified," followed by Bro. E. R. Root's comments and experiments. In the next number of "Gleanings" we find something more about it, showing that Mr. Root believes Dr. Miller's discovery is "one of the most valuable ideas, in the line of feeding, that have been proposed in many a year." Here is the most important part of the editorial to which we refer:

We have been making some quite extensive experiments in the line of feeding, on the percolator idea. I am happy to announce that it is a success; but we get altogether the best results with the crock, a few folds of cheese-cloth, and the plate. We have fed a good many colonies by the gallon-crock plan. Into each crock, by measure, we put equal parts of granulated sugar and cold water. The mixture is then stirred, after which several folds of cheese-cloth are laid over the mouth of the crock. A dinner-plate is set on top, and the whole is inverted, and set over the colony.

At first the bees show a disposition to take the feed down slowly; but after a little they "catch on," and will empty out a crock in from 24 to 48 hours; but in nearly every instance there will be a very slight residue of sugar clinging to the bottom of the crock. This does no harm on the subsequent feeding; for more sugar and water are put in, and the operation is repeated as before. If you desire to have every particle of the sugar used up in one feed, put the requisite quantity of sugar itself into a cheese-cloth bag, tie its mouth, drop it into the crock, and fill it with water. In a day or two, both the sack and the crock will be empty; and not only that, but nice, clean and dry.

We have been trying the Miller feeders by pushing folds of cheese-cloth up under the partitions. But we find it is difficult to get the cloth properly tucked in so that in all cases the sugar and water will percolate properly. Although we have fed a good many colonies with Miller feeders on the percolator plan, we very much prefer the crock. I am rather glad that the crock gives the better results. It may spoil the *supply dealers'* demand for feeders; but every *bee-keeper* will have in the house just the very articles that will make the best feeders in the world, without a cent outlay or expense.

Now that we have given the percolator feeders a good trial, I do not hesitate to say that Dr. Miller has contributed one of the most valuable ideas, in the line of feeding, that have been proposed for many a year. It will save daubing up the good wife's stove, the handling of dripping feeder-cans, and the carrying of water, incorporated in the old-fashioned syrup, to out-yards. By the new idea, during the worst robbing time it is possible to carry a barrel of granulated sugar out into the center of the apiary, and give colonies their doses of food, made up of sugar and cold water, right in the middle of the day. There will be no robbers to speak of. Before the syrup has actually been made, it is enclosed in the feeders, in the hives. Then, too, this percolator syrup, if good authorities are correct, will not crystallize.

A Komical Komposition.—Last winter we attended an entertainment called "The Deestrick Skule," given by a certain chapter of the Epworth League here in Chicago. The following "Komposition" was written and read by our esteemed friend, Mr. Thos. R. Cone, who took the part of "Ruben Rubenstuffer"—one of the scholars who lived in the "deestrick." He was so badly afflicted (?) with stuttering

that he could scarcely read at all, which made it still more enjoyable, as well as "komical." Here it is:

KOMPOSITION ON THE BEE.

The bee is a double-winged critter what has a hidden power that cannot be seed. When he gets mad he is a holy terer, and when he climes upon your bee-in, he gives vent to his feelins that can't be heard but felt.

The bee can do more damage in a minit than most animals kin in hole week. If you have any bisnis with a bee, never 'proach him from the rear, fur it would not be wise. Most fowels have only two legs, but the bee what chased me and Deacon Wayback last Sunday, when we were out huntin, hed 500 legs. So Deacon Wayback sed.

The fust bee was diskivered by Georgie Washington when he cut down his ma's cherry tree, and he could not tell a lie, 'cause it stung him to the heart.

Me and Ikie Schnickelfritz found a bumble-bee's nest tother day, and Ikie he sed he knowed how to lick bumble-bees; and he jest put puckerin' strings on the bottom of his britches, and then he jest dared the critters to find where he was at! And then he got down on his face and put his head under a haycock, and acted awfully brave! He said he was infallible. I guess Ikie's ma had not zamined his clothes very soon, fur the bumble-bees found a thin spot, and they jest backed up over that there thin spot, and they tetered up and down, and Moses! you oughter to have seed that thar haycock move! I almost split a lafin!

The poet Shakespeare talks of bees in his novels, when he sed, "To be, or not to be, that is the question."

MORRALL.

Oh, bumble-bee, thou sweet-winged creeter,
Upon our anatomy thou doth teeter.
With eyes protruded, with a wild cry and
a jump,
The small boy doth murmur, "Ah, feel that
lump!"

Yours troly,

RUBEN RUBENSTUFFER.

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

Read our great offer on page 546.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Nov. 10.—Western Washington, at Tacoma.
G. D. Littooy, Sec., Tacoma, Wash.

Nov. 13, 14.—Illinois State, at Springfield, Ill.
Jas. A Stone, Sec., Bradfordton, Ill.

Nov. 14, 15—S. W. Wisconsin, at Montford, Wis
A. A. Arms. Sec.. Hurlbut. Wis.

Dec. 5.—Central California, at Hanford.
J. F. Flory, Sec., Lemoore, Calif.

Dec. 18, 19—Northern Illinois, at Rockford, Ill
B. Kennedy, Sec., New Milford, Ill.

1895.

Jan. 9.—Indiana State, at Indianapolis, Ind.
Walter S. Pouder, Pres., Indianapolis, Ind.

Jan. 21, 22 rada State, at Denver, Colo
H. Knight, Sec., Littleton, Colo.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Jan. 30, 31.—Vermont, at Middlebury, Vt.
H. W. Scott, Sec., Barre, Vt.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

☞ **In order to have this table complete Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

North American Bee-Keepers' Association

OFFICERS FOR 1895.

PRES.—R. F. Holtermann.....Brantford, Ont.
VICE-PRES.—L. D Stilson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson...Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
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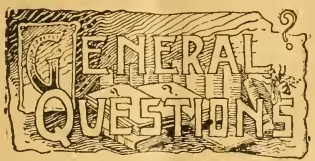
"The Jerome Banners," by Miss Irene Jerome, are something new in the line of artistic designs. Each Leaflet or Banner consists of four panels beautifully decorated in colors and gold, attached by ribbons of appropriate colors, combined with elegant extracts from popular authors, and enclosed in decorated envelopes. This unique set of publications differs from anything previously given to the public, both in illustrations and form. It consists of four designs in color and gold, which are called Banners, each being composed of four separate panels or cards, 5x7½ inches, connected by colored ribbon, so that it can be displayed on the wall, or folded into an ornamental envelope which accompanies it, in book-form. The price of each Banner is 50 cents. Sold separately if desired, or $2.00 for the entire set. Each Banner, when hung, is about 21 inches long by 7½ wide. Address, Lee & Shepard, Publishers, Boston, Mass.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Loss of Queens in Introducing.

I introduced a queen on the 5-day plan. She was all right when the 5 days were up, but I found her 4 or 5 days afterward thrown out in front of the hive. Why did they accept her, then kill her? Or is that often the case? I have lost ⅓ of my queens in introducing this fall. Is that above the average lost? W. P.

Choctaw City, O. T.

ANSWER.—Yes, your loss is heavier than usual. With regard to the queen you mention, if a queen is fully accepted and goes to laying, she is rarely rejected afterward. Sometimes, however, the bees seem to think she'll only do till they can get another queen started.

Wintering Nuclei, Etc.

1. Can I with safety (to queens) unite in one hive for winter two nuclei, separated with a division-board having queen-excluding metal 4x4 inches on each side of the opening in the division-board? How shall I prepare nuclei for winter?

2. On Aug. 5 I purchased a select tested queen. I found on Oct. 2, two frames containing two or four eggs in each cell, four frames partly filled with honey and no eggs. Is this indication (more than one egg in a cell) a detriment to the quality of the queen? Please give the reason for this excessive laying. R. C. W.

ANSWERS.—1. I have wintered probably a hundred or more nuclei in the way you mention, only no excluder zinc between. Simply a division-board ⅜-inch thick between the two nuclei, then wintered the same as any colony. There's surely an advantage in letting one have the heat of the other, I think. In all cases where the two are clustered up against the division-board, making a solid cluster with the division-board in the middle, I am afraid the zinc would not be quite so good.

2. If a queen is present, and there are not bees enough to cover well the other combs, the plurality of eggs in a cell shows a good queen. If the eggs are in drone-cells, I should suspect laying workers.

Cedar Wood for Feeders and Supers.

Are bee-feeders made of cedar lumber any detriment to the bees? I made some percolator feeders as described by you recently, and the very next day the water above the sugar tasted of cedar. Also, could surplus honey get any flavor of cedar on account of using cedar lumber for supers? J. F. R.

Puyallup, Wash.

ANSWER.—While I wouldn't want to keep extracted honey in cedar vessels, on account of the taste, still I hardly think it would do any harm to the bees. It might be well to let the feeders stand for some time filled with water before using. That would take away some of the rank flavor.

Cedar supers would be all right for comb honey. The flavor of pine is quite strong, but I never knew it to affect sections of honey.

Section Slats—Winter Protection.

1. In using sections for comb honey, how can best results be obtained from slats or tin rests? I have had no experience, as I am a new hand, and the grasshoppers have interfered with the honey crop for three years.

2. About what is the cheapest and best winter protection for bees?

Wood's Cross, Utah. W. C. A.

ANSWERS.—1. There is a difference of opinion. Some like one, some the other. For my own part, I like the T tins.

They don't sag. The wood slats cover the bottoms of the sections, but that makes a temptation for the bees to crowd in propolis along the edges, and I think I'd rather have the sections bare.

2. That's a pretty hard question to answer. There are so many ways and so many conditions. In my locality I think cellars are the best protection, and I suspect they are in yours. But if I were in your place I would try to find out what was successful in the hands of bee-keepers near by. If you don't cellar, try to have something in the line of a wind-break on the side of the prevailing winds, even if it is nothing more than a pile of corn-stalks.

Wire Staples for Bottom-Boards, Etc.

You speak of having taken a fancy to those wire staples for securing bottom-boards, covers, etc. I have used them for years— got the idea from the double-pointed tack. Unlike some things I have become enthusiastic over at one time and another, the longer I use them the better I like them. I have made mine in a slow, "pokey" way, by hand, using a hammer and dies, and cut them from steel wire. If you find any place where they are manufactured, you would confer a favor by sending me the address of the firm. J. A. N.

ANSWER.—These are the staples mentioned by L. Highbarger. After some inquiry I got a supply from Bullard & Gormly Co., 78 Randolph St., Chicago. They call them "tobacco staples." Cost 7 cents a pound. I got the 1¼ inch size —¼ inch larger than the size Friend Highbarger has been using. There are about 260 staples to the pound, so the expense is light.

A Kind of Bee-Grub or Maggot.

One of my neighbors who keeps a few bees found quite a number of dead bees on the alighting-boards, and as the lady of the house is the chief worker of the family among the bees, she examined them and in each bee she found a grub or maggot, white, with two black points resembling eyes on the larger end or head. They were in the abdomen of the bees, and were in size from a 4-days-old larva to one nearly ready to seal over, but whether it will kill all the bees or not is hard to tell. I have found but one so far in my bees. We cannot find any description in any of our bee books or papers, and I write you to see if you could let us know through the "American Bee Journal" what the plague is, and how it gets into the the bees. Is it probably fatal? Did any of the "bee-ologists" ever see or hear of anything like it before?

The yield of honey was very good here this year, and the bees have their brood-chambers full. J. S.
Westfall, Oreg.

ANSWER.—I don't know a thing about it. I asked the convention at St. Joseph, but could get no light. Send one of the affected bees to L. O. Howard, Entomologist, Department of Agriculture, Washington, D. C. Possibly he may be able to identify it.

Queen Stopped Laying, Etc.

In looking over my bees a few days ago, I found the colonies strong, with plenty of honey, but no brood nor eggs. I have only three colonies; all were alike. I looked for the queen in one, and found a fine looking queen but no eggs or brood. Do the queens quit laying at this time of the season?

There was very little honey for them here the past summer, and they were quite weak last spring, and I did not let them swarm, or at least I tried not to, and, in fact, I saw very little inclination to swarm until quite late, and I never saw but one drone all summer among my bees. Could it be possible that they swarmed, taking the old queen and leaving a young one, and with no drones for them to mate with, and so leave the queens barren? Or would they swarm under such circumstances? C. W. C.
Sac City, Iowa.

ANSWER.—I don't believe you need worry a bit. It's nothing unusual for queens to stop laying in October, and this year they seem to stop earlier than usual. Some of mine stopped in October.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

The Care of Children.

O Ignorance, how much suffering is laid upon your broad altar, the} fires ou which are not quenched by torrents of human tears! Are you destined forever to hold us in bondage, that our cries and sufferings may rise to your indifferent senses, and be unheeded? Will the day ever come when the intelligence, or even the thoughtfulness, of our humanity may free us from your enthralling grasp? If so, Heaven speed the day that, at least, our children may be spared the results of our seeming heartlessness!

How the heart goes out in deepest sympathy for the little child so unfortunate as to be in the care of those reckless fools who lift, swing and jerk the little one's arms as it is often seen done! There go that man and woman—whom it is a sacrilege to call its father or mother—arrived at that ditch, and taking each a hand of the little one, jerk it across as they jump over! That its arms are not dislocated at the shoulder is no credit to their contemptible folly. Many a child's arms have been put out of joint in this criminal manner, and when the child has cried with resulting pain, been whipped for its protest. Far better had that man taken the tender burden and carried it in safety.

Many a cripple has had to suffer a life of humiliation and pain because of such foolhardy practices. Many a poor hunch-back has been made so by being thrown up in the air when a babe and its spine weakened and curved. Many a "pigeon breasted" child owes his deformity to being swung repeatedly by the arms. Many a sufferer from hip-joint disease—from crooked legs—from dislocations—from enlarged and stiff knees—from permanently paralyzed lower extremities, conditions worse than death itself, are to-day walking illustrations of the ignorant cruelty of those whose bounden duty it is to protect their little ones with their very life, if need be. Little need or value to deplore these results in after years. Loving care and reasonable judgment would have avoided the evils that now no physician can heal.

Dr. C. C. Miller's Cisterns.

Anent the questions asked on page 471 by that hard-headed, soft-hearted brother, I am a little "stumped." He says he *won't* build a root-house, and so that point is settled.

Now, as to reconciling his ill-smelling cistern next to his residence, I can offer little consolation. A man of so clear perception need not be told how dangerous it is to have bad smells so near his home, and the feasibility of filling up the said cistern with nice, clean gravel, must occur to him.

I cannot recommend that he burn the house—the law does not permit me to be a party to the crime of arson. Nor could I, from humanitarian reasons, advise a measure that would likely insure the destruction of a whole menagerie of fleet and creeping things; four-footed, many-legged, and winged inhabitants. To disturb so large and domesticated family would be cruel in the extreme!

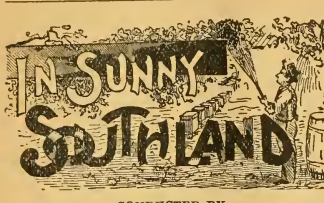
Only another suggestion occurs how Dr. Miller may "make that cistern sweet:" Dump in all the honey and sugar you can find; I think that'll do it.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

Bound in paper cover, postpaid, 65 cents; or given free as a premium for sending us two new subscribers; or clubbed with the BEE JOURNAL a year—both for only $1.40. Send all orders to the BEE JOURNAL office.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See page 571 of this number of the BEE JOURNAL for description and prices.



CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Another Remedy for Paralysis.

MRS. ATCHLEY :—Tell Mr. L. B. Smith to try this recipe for bee-diarrhea :

One ounce of carbolic acid, and 3 ounces of salt, to 13 pints of water.

I effectually cured 12 colonies—two with diarrhea, and ten with paralysis—last spring. I sprinkled the tops of the combs and the bottom-boards three times a week. In eight days all symptoms disappeared. I got my hint from the "American Bee Journal," seeing where the recipe had been successful in preventing foul brood. JOHN B. BLACK.

Pattonsburg, Mo.

Friend B., I am glad to have your remedy, and among so many thousand bee-keepers in the world, we *surely* can find a sure and effective remedy for this dread disease among our pets. Some one that has the chance, try this and report. JENNIE ATCHLEY.

Bee-Keeping in South Texas.

MRS. ATCHLEY :—I have been thinking of going to Texas for some time. Is there room for more bee-men? Bees are my most delightful pets. How have you come out in that part of Texas? Do you like that part better than North Texas? I wish you would write another article about how you like that part of Texas, and have it published in the "American Bee Journal," for my interest and others who are talking about going there. J. H. BERRY.

Gale's Creek, Oreg.

Friend Berry, I will inform you that there is *plenty* of room here, and will be for many years to come. You see Dr. Miller gave me a good lecture lately, and his advice has done me good, as I had not heretofore made my answers as plain as I should.

Now I do not mean that there is an abundance of room right at Beeville, as we have this territory pretty well stocked. We will have about 1,500 colonies here, scattered in different directions, and of course it would not be best for either myself or the other bee-keeper to locate in my territory, but I am the only practical apiarist in this county, or adjoining counties, as far as I know. I mean by "practical," one who gives his or her *whole* attention to bee-culture, and depends upon it for a living entirely.

But I will say that the counties of Bee, Live Oak, McMullen, San Porticio, and Goliad can support 50,000 colonies of bees, as there is carload after carload of honey wasting every year for want of bees to gather it.

I can place 100 bee-keepers in good localities for honey, and not interfere with my territory, or have them crowd each other.

Yes, I like this country better than North Texas for a bee-country. It is more healthy, drier, and the most pleasant country I ever lived in. We can go out and look after our bees any day in the year. It rains but little in the summer, and that is fine for the bees. We have now been here a season, and have all the short cuts noted down, so we can run our bees more profitably another year. We have all the honey-plants down, and can tell you in a few minutes just when to have your bees ready to catch the harvests. Mr. A. and I will take pleasure in locating *all* who may come to this part of the country to keep bees. We really need 20 more good bee-keepers in this county.

JENNIE ATCHLEY.

Bee-Eating Birds.

Mrs. Atchley says they never trouble her bees. Well, if they do not, where did those hundreds of birds come from that passed over here about two weeks after she left Greenville? They began flying over on Friday evening, about half an hour before sundown. They were very hungry, and passed right through my bee-yard, not over 15 or 20 feet high. On Saturday evening hundreds more passed over. I was ready for them this time with a shot-gun. The bees were after them, and fighting for life. I could see from one to a lot of bees after each bird. The birds would hide in trees near the yard.

I learned one thing, and that was, the

bees knew the birds were their enemies. The birds have returned, and I am waging war to exterminate them, as they will eat up my bees.

Terrel, Tex. DAVID CROSSMAN.

Friend C., I never saw such a thing in my life. May be the bees just fought to run them away, and the birds did not eat them. JENNIE ATCHLEY.

Melting Honey.

MRS. ATCHLEY :—We have some honey stored from fireweed, and we warmed it to bring it back to its liquid state, as it was candied. We placed it on the stove by putting the can containing the honey into another vessel of water, and brought to a boil, as given in the "Bee Journal," but it gave the honey a strong taste. We would like to have your opinion on this matter. We also have white clover and fruit-bloom honey candied.

W. H. DAUGHERTY.

Mt. Tabor, Oreg.

Friend D., I am of the opinion that you boiled your honey too much, as it should not injure honey to melt it. Mr. R. Wilkin, of California, told us that he scorched several hundred pounds by heating it too much by a jet of steam. I would suggest that you try it again, and put two strips of wood for the honey to rest on, and warm it gradually until melted. JENNIE ATCHLEY.

Bees on Turpentine and Sulphur.

MRS. ATCHLEY :—I thank you for answering my questions. I wish to ask another through the "Bee Journal." Why do bees collect on turpentine and sulphur? My chickens were sick, and I put turpentine and sulphur in their water. The bees gathered around the water just as if it was honey.

Dorchester, Nebr. F. C. LEE.

Friend Lee, I am puzzled this time, and I do not know. Will some one explain this for Friend L.? Prof. Cook would be the right one to do it, I think.

JENNIE ATCHLEY.

A Namesake.

MRS. ATCHLEY :—My wife has a sweet little baby girl two weeks old. Being enthusiastic admirers of you as a bee-keeper, we have decided to name her "Jennie," for you, and hope she may some time be a noted bee-woman, too. If you will send her a queen, I will start her in bee-keeping, and when she gets old enough I will try to interest her in apiculture by telling her how the start was make for her, etc. It would certainly be pleasing to us to have her become a successful bee-keeper.

We have 12 colonies of bees on Langstroth frames. We have black bees, but wish to change to Italians soon. We had the poorest season for honey last season ever known in this section.

Demorest, Ga. J. E. FREE.

Friend F., I gladly send little Jennie the queen, and trust that she may grow up to be a successful bee-keeper, and be a pleasure and honor to her parents.

JENNIE ATCHLEY.

Best Management of Swarms.

Query 946.—Which will give the better results — hiving two swarms together at swarming-time, or hiving each separately on a reduced number of frames, one-half or one-third, owing to size of swarm, and when the white honey-flow is over unite by removing the queen from one hive and filling up others by placing in frames and bees alternately?—Indiana.

The latter, probably.—EUGENE SECOR.

Hiving two swarms together.—MRS. L. HARRISON.

We would put the two together at once.—DADANT & SON.

I should prefer hiving the two swarms together.—G. M. DOOLITTLE.

Hiving the swarms separately in hives of proper size.—J. A. GREEN.

By hiving two swarms together at swarming-time.—W. G. LARRABEE.

I always give a good prime swarm a hive. I think it pays best.—A. J. COOK.

If the swarms are primary ones, of good, average size, hive separately for

the best results. If they are only "casts," hive together for the best results.—J. P. H. BROWN.

The latter method, decidedly, unless the swarms are very small.—R. L. TAYLOR.

Much depends. In my locality I would practice your first suggestion.—J. M. HAMBAUGH.

Hiving them separately in a contracted hive, and then uniting, will give the most white honey.—B. TAYLOR.

I don't know. If the honey-flow is to last long, perhaps hiving separately; otherwise uniting.—C. C. MILLER.

If swarms are weak, I always unite them at swarming-time, and never unite at any other time.—JAS. A. STONE.

If the swarms are not too late or too light, better results will be obtained by hiving separately.—MRS. J. N. HEATER.

If the swarms are large, hive them separately; if small, put enough together to make a strong colony.—E. FRANCE.

It all depends upon the condition of the swarms. If small swarms, put them together; if good fair swarms, hive separately.—H. D. CUTTING.

The success of either method will depend upon locality—that is, time of making swarms, and time of main honey harvest, whether early or late.—P. H. ELWOOD.

This will depend upon the size of the swarms. I do not think I would care to unite two good swarms, but there might be times when it would pay. If I intended to unite at any time, I would prefer to do it when the bees swarm.—EMERSON T. ABBOTT.

So much depends upon circumstances that a definite answer cannot be given. What would give the best results in one locality would fail in another. Nothing is to be gained by uniting large swarms, and two small ones will do better united than separate.—M. MAHIN.

I have never tried the plan, so I don't know. I don't intend to have such small swarms as are indicated in the question. I return second or third swarms, or, in fact, all small swarms, to the parent colony, as it does not pay me to fuss with them.—J. E. POND.

If the swarms were not too large I would hive them together. Good, strong swarms, at the beginning of the honey season, is what we should aim for. One such colony is worth three or four weak (or "middling fair") colonies. One of the secrets of success is to have our colonies strong and in working condition during the working season. Let increase be always secondary to the good, healthy and vigorous condition of our colonies.—W. M. BARNUM.

That would depend upon the season. In a good season, hiving two such swarms together would give the most surplus—*if they do not swarm again.* I believe, however, that hiving separately on a reduced number of frames, and uniting afterwards, will generally pay best.—C. H. DIBBERN.

I would do neither in the way you state it. But if one of the queens is removed at the time the two swarms are hived together, there is less trouble about absconding, or, what is little better, sulking, and wasting of valuable time. I only "contract" when I decide to work the bees into cash, in way of surplus honey.—G. W. DEMAREE.

I do not know in your State, but for Texas I will always take the swarms separately, large or small, and build both up for our honey-flows. But for your latitude, you may get more honey by hiving both together, contract the brood-nest, and force them into the sections—*a la* Hutchinson. I would not unite at all in my latitude.—MRS. JENNIE ATCHLEY.

It would seem by 946 that honey instead of increase is your object; if so, and your honey harvest is likely to be a short one, it would be best to unite at swarming-time, as two moderate-sized swarms might, if united, gather some surplus. If hived separately, they would no more than gather enough for their own wants. If the honey season was to be a long one, it might change conditions.—S. I. FREEBORN.

Sam and Mandy "Keep Bees."

BY A. B. KEEPER.

(Continued from page 246.)

Having finished my work in a couple of hours, I strolled down to Sam's domicile to see the new candidates for apiarian honors, and help them out with some instruction. Arriving near the place, I was arrested by sundry exclamations and an excited colloquy. Approaching the fence, I paused, and seeing Sam and Mandy in front of the bee-hive, I waited to see what they were "up to." Sam had a burning rag

wrapped on the end of a stick, and was blowing the smoke into Mandy's eyes and the hive.

"Hi, dar! you fool nigger! Stop blowin' smoke in mah eyes, er I bust you ober de head wid dis pan!"

"How you specs Ise gwine to make all de smoke go one way, huh?" replied Sam. "Keep yo eyes outer de way. Dars er lot uv 'em now—ketch 'em!"

Mandy made a dash at the entrance with a cloth she held, and covering the entrance and alighting-board, she held fast, while excited and angry bees buzzed about her head, occasionally stinging, judging by the way she bobbed her head and uttered excited grunts. Sam retreated promptly when Mandy dashed the cloth over the entrance, and from a safe distance gave instructions.

"Hol' 'em tight, niggah! Don' let em git loose!"

"Bettah come heah and blow dat smoke, 'stead ob stannin' dar and talkin'."

Thus admonished, Sam cautiously approached.

"Now hol' dat 'lasses 'n I feed 'em!"

A light dawned on me, and with difficulty I repressed a hearty "Haw, haw, haw!"

Sam and Mandy were about to feed their bees. Sam had a small stick, and Mandy turned up her cloth cautiously, and when a bee appeared Sam pinned it with the stick, and from the end of another small twig a drop of syrup was dropped on the poor bee's head.

"Dar, honey; eat yo se'f full. Poor little fellah was hungry. Aunty Mandy feed um."

Thinking things had gone far enough, I put on a veil I had brought, and approached. Sam espied me first, and arose with a broad grin on his black face, which quickly changed to a howl as a bee "kissed" him.

"Gosh a-mighty! U-u-u-u-u!" sputtered Sam. "G'way frum hyar! Lemme 'lone, pesky debbil, yo!"

Mandy pulled her cloth from the hive-entrance, and quickly retreated behind a tree, where she laughed long and loud.

"Ki, yi, fool niggah git stung! Hi, hi, hi! Reckon ef Brudder Jones har yo talk dat ar way, he gib it to yo!"

Matters finally cooled down. Sam was consoled by the word-picture of the honey he might get next fall, and the infuriated bees returned to the hive. Mandy's face, upon examination, was found to have no less than a dozen stings in it, yet no swelling appeared.

"Don't min' um," quoth Mandy. "Only fool niggahs make er fuss ober nothin'"—with a sidelong glance of contempt at Sam.

"Wuh! wouldn' min' er common little bee-sting eeder. It war de king-bee wat stung me!"

Mandy was forced to subside at this startling statement of facts (?), but she looked doubtful.

"What were you two doing?" I inquired.

"Feedin' de bees, boss," replied Sam. "Mandy cudent wait, kase she sed de bees was mighty hungry, so we jest gwine to feed um."

"How were you going to do it?"

Sam described the process as I have related it, and ascribed its invention to Mandy with an alacrity which made me think he suspected the method was not what it should have been. I could not repress a hearty laugh at the conclusion, at which Mandy looked crest-fallen.

"How yo do um, Mars Frank?" she queried.

"Why, Mandy, you just take these sections out, having this super empty, then set a dish in on the frames, fill it with large, clean chips from the wood-pile, and pour syrup over them. Close the hive, and leave it till next evening. Then I would advise you to repeat the dose, and if honey does not come in soon, you might feed them once a week until it does."

"Well, I 'clare to gracious! who ebber tink ob dat? Tink I hab to feed ebery bee by heself."

A broad grin had by now overspread Sam's face, though it was one-sided on account of the swelling caused by the "king bee's" sting.

"Who er fool niggah now? Hi, hi, hi! Gwine to feed um wi' er stick! Bettah git er spoon, nex' time, n' tie er bib on dere chin, hi, hi!"

Sam's mirth was brought to a sudden close by the fat hand of Mandy coming with a resounding slap across his cheek.

"Bettah button up dat big lip ob yourn. Specs yo didn' know any bettah yose'f."

Peace being restored, I gave them some further instructions regarding the best location for their hive, and about keeping the weeds down around it, and told Sam whenever they wanted further help, to call on me. I had them feed the bees, and giving them an old smoker I had brought along, I left them to their own devices once more. How they got along with their bees I may tell you in the future, if this interests you.

Darktown, Blackland.

NOTES ON THE ST. JOSEPH CONVENTION.

BY W. Z. HUTCHINSON.

How much watching, planning and contriving, and how much hard work is required of an editor that he may be absent even for only a few days. Monday morning, Oct. 8th, found me at the end of such a preparation for an absence of nearly a week to attend the St. Joseph (Mo.) convention. The "Review" was out and mailed, all possible correspondence answered, all queens mailed, Mrs. Hutchinson given numerous instructions as to how this and that was to be looked after, and such and such answers made to such and such inquiries; the coal stove was blacked and set up, coal in the bin, wood in woodshed; care taken that there was a stock of groceries on hand, that the good wife might not be obliged to leave home on a marketing expedition, the little black sachel, that had been standing for several days on a shelf near at hand, so that when I thought of anything that I might wish to take with me, I could put into the sachel and thus not forget it, received a dainty but wholesome lunch as its last consignment, and I kissed the wife and babies and was off.

I have several times been over the road between here and Chicago, hence there would be nothing new in the scenery, so, to pass away the all-day's ride, I had sent for a book to read. It was "Picter Making by Photograph." It came a day or two before my departure, but I resolutely put it away without even looking at it, because I knew too well what even a glance at its pages would mean.

I reached Chicago between five and six o'clock, and went at once to the office of the "American Bee Journal," where I found Bro. "George" putting the finishing touches to a preparation for absence. Six o'clock found us on the train for a six-mile ride out to where the editor of the "American Bee Journal" and Dr. Peiro live as neighbors. Bro. York has a pleasant home. Mrs. York is not only an excellent house-keeper, but, if I mistake not, she is also an excellent "business manager." Bro. York once wrote me that although Mrs. York was not publishing the "American Bee Journal," she knew all of the time pretty nearly what was going on at the office. As I am more than willing to admit that Mrs. Hutchinson is a better business woman than I am, I feel sure that Bro. York will not be offended at my throwing out these vague hints.

I had supposed that there would be something of a little crowd gather in Chicago to go on the same train to St. Joseph, but when six o'clock came, and Bro. York and myself and Dr. Peiro climbed aboard of the "Eli" (the train is given this name, I suppose, because it "gets there"), we were all the "crowd" of bee-keepers there was on board. Out at Aurora, Ill., we picked up Dr. Miller, which, in one sense, doubled our crowd. Soon we were snugged away in one of the compartments at the

end of the car, and I brought out my collection of apicultural photographs and passed them around. Then we talked of the past, and built castles in the future, and, as Dr. Miller remarked, enjoyed the best part of the convention. At last we were tucked away with a Doctor in each berth, and my last memory was of raising the curtain a wee bit, and seeing the moonlit, prairie landscape apparently slipping silently back towards Chicago.

When we awoke in the morning the sun was shining brightly on what might be fairly called the garden-spot of the earth. How homelike it did seem to see rolling land again, with good-sized trees growing upon it. Then there was orchard after orchard bending with bright-red apples that glistened in the morning sun. The soil was dark and rich, and, with one exception, there was a thrifty look about the farms, and that was the great fields of corn-stalks going to waste; that is something seldom seen in Michigan.

As we left the "Eli" at about ten o'clock on Oct. 10th, the first man to meet and greet us was E. F. Quigley, of the "Progressive." He is a nice-appearing young man, but, like myself, is a little too quiet in conventions. Bro. Quigley, you must talk.

President Abbott had left no stone unturned to make our stay in St. Joseph a pleasant one. The Commercial Club rooms, at which the meeting was held, were the most pleasant of any place at which the North American has ever met. They were really luxurious. Carpets on the floor, stained-glass windows, tables furnished with writing materials, and covered with magazines and illustrated papers, while the chairs were great, big, comfortable, leather-covered, platform rockers. A few members had already arrived, and Secretary Benton was at his desk taking in the dollars and giving out badges and "numbers."

THE "NUMBERING" SCHEME.—Just a word of explanation about the "numbers." At all conventions there will always be present members who are strangers to the one reporting the proceedings, and when such a member addresses the meeting, and the President does not know him, and announce his name, it must be asked for, which makes an awkward break in his remarks. By numbering the list of members, and attaching the respective number to the lappel of each member's coat, all this annoyance is done away with. This plan ought, however, to be carried one step farther. Let the Secretary make arrangements with some near-by printing office, to put the names and numbers in type at the end of the first session, and print enough copies to furnish each member with a copy. Then a simple glance at the list will show everybody who is present, and a glance at the numbers and the list will show who is who. If many new members should come in after the list had been printed, a new list could be printed and distributed. It has happened that a man has gone home from a convention not knowing that some one he very much wished to meet was present. The value of a convention is greatly increased by an early acquaintance among the members. If one objects to appearing upon the street with a number attached to his clothing, it can be removed upon leaving the hall. Friend Benton is to be congratulated upon inaugurating this scheme.

SOME CRITICISMS.—The criticisms brought against the Chicago meeting of last year—that of opening the meeting with no programme arranged, and of holding only a two days' session when three days had been advertised—cannot be urged again the St. Joseph meeting, but there was one mistake made in getting up the programme, and I am not sure but it is a worse one than that of having no programme at all. It is not pleasant to point it out, as it is evident that this feature was secured at the expense of considerable trouble and correspondence, and with

the best of intentions. I have reference to the securing and reading of long essays descriptive of bee-keeping in foreign lands. They were evidently prepared with great care, and were really interesting reading, but they could have been read in the bee-papers and enjoyed just as much as to have heard them read at the convention. We cannot afford to travel hundreds of miles to listen to what we can just as well read in the papers. The only use for essays at a convention—no, I think I would better modify that a little—the *principal* use for essays at a convention, should be to provoke discussion. A long, exhaustive essay by a master hand—an essay that covers every point—leaves little room for discussion, and would better be printed in some periodical instead of read in a convention, A convention should be discussion—red-hot discussion—from beginning to end, and essays that tend to bring about this condition are a help; otherwise not.

But there is such a thing as holding a convention down too closely to bee-talk. The brain becomes tired, and refuses to do good work. To begin in the morning and continue it until noon, then spend the whole afternoon in bee-talk, and stop for supper only to begin again and keep it up until a late hour, is too much of a good thing. Then think of continuing this for three days! There should be frequent intermissions, or the introduction of music or something of this sort, and it is better that it be scattered through the sessions than that one whole session be given up to this sort of thing.

Having made these criticisms, it is a pleasure to say that the St. Joseph meeting was a grand success. Those western men are whole-souled and open-handed, and so kind and cordial in their manners that some of them actually persuaded their wives to come with them! After the long essays had been read, and the question-box was opened, the convention also seemed to "open up," and there was a lively discussion.

Feeding Back Honey.—"What valuable facts were brought to the surface?" That is what the non-attendant wants to know. Now let each person who was present be honest with himself, and go carefully over the points that he learned at the convention, and see how many he can count up. Those who are not readers of the bee-papers may find quite a number; otherwise I think it will puzzle some of them to say what they learned. I have put myself to this test, and I can remember just one thing, and that made me prick up my ears and go over and sit down by Mr. C. F. Lane, of Lexington, Mo.; also to quiz him still further at the hotel. The question of the profitableness of feeding back honey to complete unfinished sections came up, and Mr. Lane said that he made it pay, and he succeeded by putting one or two colonies in a tent, piling supers of unfinished sections on top of the hives to the height of eight or ten supers to the hive. He then brought in weak colonies, or those having poor queens, or those that for any cause he did not consider very desirable colonies for wintering, and united the bees with the colonies over which the sections had been piled. This course filled the hives and the cases of sections "jam full" of bees.

To feed the bees, he simply took unfinished combs of honey, uncapped the honey that was capped, and stood the combs up around the hives, and the bees came out and carried in the honey and finished up the sections. Of course it is not necessary to use unfinished combs for feeding purposes, any kind of combs will answer, but one would naturally use such if there were any, in preference to using full combs.

Mr. Lane also said that after the bees had been in the tent a few days, they could be fed from a feeder placed at the opposite end of the tent. They would fly out and visit the feeder, load up, and then return all right. His tent is 40x20 feet in size. He admitted what I can readily believe is true, viz.: that there are quite a

number of little kinks about the business that can be learned only by actual practice. To one who is making a practice of feeding back, the acquisition of this little item of information might be worth all that it cost to go to St. Joseph. I seldom attend a convention without running against some such chunk of wisdom; but to leave home with the idea that every hour will be fraught with startling revelations, and that words of wisdom will drop out whenever lips are opened, it is to court disappointment.

Convention Advantages.—The most of our bee-papers, if not all of them, are edited by bright men. Nearly all of them are practical bee-keepers, and know a good thing the moment it is brought to their notice. All of them are on the alert for these good things with which to enhance the value of their papers, and some of them don't wait for these good things to "turn up," but go out and "rustle" around the country and *turn* them up. The moment that a discovery is made it is caught up by the papers and spread broadcast over the country. Under these conditions it is well-nigh impossible that anything so awfully, awfully new should be brought out at a convention. Sometimes we get hold of a veritable gold-mine in the shape of a practical man that won't write, but who can be made to stand up and talk; then we sometimes get hold of something worth going a long distance to hear. Then, again, the leading bee-papers always have representatives present, and little of value is said that does not appear upon their pages.

We may as well admit that the inducements to attend conventions are not what they were once; but, let us be thankful there is one feature that the papers can never usurp, even if they have given us pictures of most of the prominent bee-keepers, and that is the social part of a convention. It is the main thing left for convention-goers, and there is nothing small nor mean about it, either. We are a band of brothers, but sometimes some of us get to feeling a little edgewise towards some of the brethren. We think there is good reason for it, and perhaps there is, but when we meet the offender face to face, take him by the hand, sit by his side, and see an honest soul shining out of his eyes, we find our enmity melting away. It would not surprise me if several people went away from St. Joseph with a better opinion of somebody else than they had when they came. For this alone, the meeting is worth all that it cost.

Then, again, it is an advantage to have a personal acquaintance with those who write for the bee-papers, even if that acquaintance is only a short one. For instance, during quite a lengthy discussion last summer in the "American Bee Journal," I fell to wondering several times whether one of the disputants was a man of real good sense, or the reverse. Later I had the pleasure (?) of his company for one-half hour, and in that short space of time he had "given himself away;" I had been enabled to decide in regard to the value that ought to be placed upon his observations and conclusions. An acquaintance with the writer increases the value, to us, of his writings.

The Revised Constitution.—One good stroke of work accomplished at this meeting, was the revision of the Constitution. All of that matter relating to affiliation, delegates, honey companies, etc., was thrown out; in fact, there are no By-Laws left, nothing but a short and simple Constitution. The salary of the Secretary was placed at $25; now when a man accepts the office he knows what to expect for his services, and there will be no chance for any wrangling over the matter.

Speaking of the Secretary, reminds me of another suggestion that I would like to make, and that is, that there is nothing gained in spending a large sum of money in printing notices of the meeting and paying postage on them in sending them out to agricultural papers. A man who is not sufficiently interested in bee-keeping to

be a reader of some one of the bee-papers, will not come any great distance to the meeting because he saw a notice of it in some agricultural paper. Notices in the agricultural papers of the region in which the meeting is to be held might possibly induce the attendance of a few farmer bee-keepers, but, aside from this, notices in the bee-papers are all-sufficient.

Having made this criticism, it is only fair to praise Secretary Benton for his success in persuading non-attendants to send in their dollars. By sending out circulars to all old members, thereby calling their attention to the advantages of keeping up their membership even if they could not attend each year, twenty members, some of whom did not attend, were induced to send in their annual fees. Such an accomplishment is without precedence. It seems wise to each year point out the mistakes and the successes, that the latter may be patterned after in the future, and the former not repeated.

A Bee-Paper Offer.—One quite sweeping change was made, the wisdom of which is yet to be decided. To each annual paying member in 1895 the association promises to give the choice of any bee-paper published in the United States or Canada. To help the Association do this, all of the editors present, except myself, promised to furnish their papers at very low rates—away down below their lowest clubbing rates. I presume I should have made the same promise if I had been asked, but, through some oversight, I presume, the question was not put to me. I fear the matter was not given sufficient thought. Why, at first thought, in his exuberant manner, Mr. Root offered to *give* "Gleanings." Suppose all of Mr. Root's subscribers should decide to join the North American, where would he be? Suppose *half* of them should take that course? At the figures that were given, some of the papers cannot stand it if any great number should join the Association. Any sum of money coming into the treasury as the result of this scheme, would come out of the pockets of the publishers.

Then there is another side to the question. Suppose that only the usual number, say 100, should pay their dues, then about half of that money would have to be used in buying bee-papers, and there might not be enough left to pay the running expenses.

If some plan could be devised whereby the membership and usefulness of the Association could be increased, it would be very welcome, but I fear it cannot be done by making ourselves presents, or asking the publishers to make us presents. The whole thing is wrong in principle, and was adopted without sufficient consideration. It is true that the Canadian societies furnish their members with journals, but the money to buy them comes from the government; besides, no journal has yet been furnished below cost.

Bee-Paralysis.—As the convention was held pretty well South and West, I had hoped to learn something in regard to bee-paralysis. The subject was freely discussed, and I had several private conversations with those who had experience with the disease. The reports are all very conflicting. That the disease is likely to disappear of itself is a fact that I fear has been overlooked to a great extent. When this is remembered, a great many strange things are explained.

Toronto Chosen.—A pleasant incident occurred when it came to choosing the place for the next convention. The choice really lay between Lincoln, Nebr., and Toronto, Ont., Canada. Last year Toronto nearly captured the convention for this year, and there was a sort of tacit agreement that we would all vote for Toronto this year; but when Bro. Stilson read invitations from the Nebraska State bee-keepers, from the Mayor of Lincoln, from the City Council, from everybody who

could have any interest in the matter, and followed this up with a warm personal appeal, there was an evident wavering upon the part of some; but when Dr. Miller explained that the voting for Toronto was a matter of honor with a large number, what did Bro. Stilson do but get up and withdraw his invitation?—an act that "brought down the house," and in all probability will take the convention to Lincoln in 1896. The choice for Toronto was made unanimous.

REDUCED (?) RAILROAD RATES.—Mentioning the next meeting brings up another point upon which I wish to make a suggestion. As a rule, it has been impossible to secure the necessary attendance for obtaining the desired reduction in railroad rates unless the meeting is held in some railroad center of the North. These rates were secured at Detroit, Mich., Brantford, Canada, and at Albany, N. Y. At Washington, D. C., and at St. Joseph, Mo., there was not sufficient attendance.

Publishers can show by their subscription lists that the great mass of bee-keepers is in the Northern and Eastern States, and Canada. Draw a line due north from St. Joseph, Mo., to St. Paul, Minn., and another from St. Joseph to New York city, and the great mass of bee-keepers will be found north and east of these lines, and a great crowd can be gathered only inside these lines. Even inside these limits it is better not to depend upon securing reduced rates by the crowd of bee-keepers alone. For instance, I believe that the meeting of 1895 can be held in Toronto at the time of a great Industrial Fair, when very low rates will be given for long distances. Where this cannot be done, it would probably be well to hold the meeting in connection with the meeting of some other society, when the two combined would secure the requisite number for obtaining reduced rates.

THE CONVENTION "PICTER."—About 10 o'clock of the last day, all of the members gathered in a group on the steps of the Court House, and were photographed. The brick of different colors with which the street in front was paved, furnished a neat foreground, while the fluted columns and ornamental front of the Court House formed a pleasing background. I spent at least an hour one morning in looking for just this spot. A local photographer made the exposures, and I brought home the plates and developed them. For so large a group the faces are unusually good. There is not a person present that would not be instantly recognized by his friends. That little numbering scheme of Secretary Benton's came in very nicely here, as nearly all of the numbers show, and I have had a list of the members with the corresponding numbers printed and attached to the picture, which enables even a stranger to decide in regard to the idenity of each person. The size of the picture is 8x10 inches—twice the size of those taken last year at the World's Fair convention.

HOME AGAIN.—The journey home was uneventful; simply one long, swift, continuous ride of 800 miles, broken only by a change of cars at Chicago. I reached home in the evening, just as Baby Fern was dropping off to sleep, but when she heard my voice, she roused up with, "Papa, did 'oo dit my 'ittle pictou boot (book)?"

(Regular Report continued on page 590.) Flint, Mich., Oct. 22.

BEE-KEEPING AS A BUSINESS.

BY CHAS. DADANT.

I am asked whether it pays to make a business of keeping bees, and I find it difficult to answer such a question in as short a way as it is stated, for a great many circumstances can have an influence on the results. Among these influences, I may

mention the ability of the bee-keeper to understand his business, and to give to his bees the necessary attention at the right time; the location in which the hives will be placed; the kind of hives to be used, etc. A great many persons imagine that to keep bees successfully it is but necessary to locate them on a quiet spot, to watch them during the swarming season, and to take the surplus of their harvest. Such was, indeed, the only conditions required before the invention of the movable-frame hives—an invention which afforded to the bee-keepers the means of studying more carefully the habits of bees, to obtain larger crops with less risks of losing them in winter.

From the above it follows that a man who does not know the business of keeping bees ought to begin cautiously with but a few colonies, say, two or three, and study the habits of bees in books first; then, in verifying the teachings of the books, by opening the hives and examining the combs, and by watching outside, the going in and out of bees. Such a study will take at least one year. Then if the apprentice bee-keeper finds some pleasure in the work, he can buy a few more colonies and increase their number either by natural or artificial swarming, or by buying bees. But I advise him to go slowly.

The locality in which the bees are kept has also a large influence on the honey crop, yet it is but a question of larger or smaller profits; for an apiary surrounded with lindens, white clover, or alfalfa, and bordered with cotton lands covered with marshy flowers has better chance to succeed than any other; but a skilled bee-keeper can have some success, even in a poor location.

Another stumbling block in bee-keeping is the kind of hive to use; above all advise a beginner not to buy patented hives, for most of these venders of patent hives do not know the habits of bees, and sell inventions more injurious than useful.

As beginners are inclined to risk as little as possible, I think that I have to warn them against the use of small hives, which require more work, more feeding of bees for winter and spring, and do not give as good results as larger ones. To my mind a 10-frame Langstroth hive is not even large enough. We prefer hives containing ten or eleven Quinby frames. These frames are larger and longer than the Langstroth, and although white clover is our only resource, our crop can compete for quantity with those of bee-keepers using small hives located in more prosperous districts.

The conditions of success in bee-keeping, after the selection of the hive, can be summed up in a few words: To know what to do, and to do it in time.—Prairie Farmer. Hamilton, Ill.

BRACE-COMBS AGAIN—FRAME CHANGES.

BY G. M. DOOLITTLE.

I see by the different bee-papers that Doolittle has caused quite a commotion on the smooth, placid waters of bee-keeping, by what he wrote on page 272 of the "American Bee Journal" for Aug. 30th. That this commotion may not result in harm to myself and the fraternity, with your leave, Mr. Editor, I will explain my position a little more, to see if we may not have a little better understanding of the matter at issue.

Years ago, soon after I commenced bee-keeping, considerable difficulty was experienced in getting bees to enter the sections readily to store surplus honey, many colonies refusing to go into them during the whole season, where box-hives were used, having an inch board for a top with holes cut through for the bees to pass up into the sections. Few frame hives were then in use, when compared with

the vast number of box-hives and gums which were found standing at very many of the farm-houses all over the country. To obviate the difficulty of getting bees into the sections, Mr. Miner invented a box-hive having no permanent top-board, but in its place slats were used, standing up edgewise, for the bees to build their combs on, and when the sections, or what were then six-pound boxes, were put on, they were put directly on these slats. When no surplus arrangement was on the hives, a cloth was laid on these slats, or more properly over the top of the hive, as brace-combs were built between the slats, and on top of this cloth a board of any thickness was placed, while a cap or hood, deep enough inside to go over the boxes, was used to cover the whole. It was with this Miner hive that I commenced my bee-keeping career, purchasing bees in said hive to start with.

When I commenced to use frame hives I thought of these slats in the Miner hive, and so made my frames very much like those described by Mr. Hill on page 307 of the "Bee Journal" for Sept. 6th, which he found at an apiary that he was sent to work in. After using such frames for a year or two I became disgusted with them, as Mr. Hill did, on account of the sagging propensity of the top-bars to the frames, and the general "mess" which always occurred in taking off the surplus honey. I then began experimenting, and finally adopted a top-bar a plump inch wide by five-sixteenths of an inch thick for the Gallup frame, and for the Langstroth frame, a top-bar one and one-sixteenth inches wide by seven-sixteenths thick, that being the size which gave me the best results, all things considered. I would have preferred the thinner, but when I came to use them so, the top-bars would sag when the bees filled the frames solid full of honey, and if made narrower the bees insisted in covering the tops of them with comb, and in times of a great honey-flow, filling this comb with honey, so I was driven to the adoption of the above. I have always used a bee-space of five-sixteenths of an inch at the ends and tops of the frames, with seven-sixteenths bee-space at the bottoms of the frames.

With such frames and bee-spaces it is a rare thing that any honey is ever stored between the sections and tops of frames, while not to exceed from five to fifteen brace or burr combs are found jutting up above the tops of the frames, and these brace-combs are always left, as I told in my former article. I still consider these few bits of comb as great helps, nearly as much so as I consider the "bait" sections which I use on every hive to start the bees into the sections early in the season, as I have so often given in the different bee-papers. Wherever bits of comb are, there bees are at home on them, and are climbing over them, inspecting them, etc., when they would not be there at all otherwise, unless crowded there by on over-populous hive, and this is why I called these bits of combs "little ladders."

After having decided on the above frames, certain supply dealers began advocating a top-bar made from ⅞ lumber, and from ¼ to ⅜ inch thick for top-bars for the Langstroth frames, the claim being put forth, that by using such, the sections would be so near the brood that the bees would enter the sections without hesitation, and better results in honey be obtained. Henry Alley, myself, and others, expostulated, but the thing was pushed to such an extent that those ordering frames different from these, were told that unless they fell into line with those using the regular goods they must expect long delays in having their orders filled, as the machinery was kept busy nearly all the while turning out this regular line; and next, all were cited to these "regular goods" being the standard and pleasing, as they had orders for them by the carload from all over the country, till the majority of frames in use were of that "regulation size."

Thus things went on till thousands, if not millions, of these narrow, thin, top-bar frames were in use, and when it was found that they sagged, tin bars were put in the center for a support when wiring them for the use of comb foundation. Thus

every one buying supplies was forced to use these sagging, burr-comb provoking, section-daubing frames, who did not have the "back-bone" to stand out about the matter, till the apiary that does not now have, or has not had, such frames in it, is the exception, and not the rule.

In the above, Mr. Hill will find his "unaccountable reason" explained.

But, presto! a change comes, and we go to the other extreme, now having a frame put before us with a top-bar as much too heavy as the other was too light, and all bee-keepers are called upon to fall "into line" once more, and some wonder why it is that Doolittle insists on keeping on in the "even tenor of his ways," and fears that his teachings will lead others astray. I wonder if it has never entered the heads of supply dealers that these changes involve much expense to the bee-keeping fraternity? Let me draw a picture:

A man with a family consisting of wife and little ones, has been struggling on as the apiary increased, to pay for the necessary hives, etc., and each year looking toward the desired number of colonies he wishes to keep, all the surplus from the bees which can be spared from the actual necessities of the family, is being put into these fixtures for the apiary. The goal is in sight, and he comes in some morning with a smiling face, and says to the "good wife:" "Next year we shall have all the bees and fixtures we shall want, except sections and shipping-cases, and this expense for hives, etc., we have had heretofore will be stopped, when I shall be able to get you a better dress, and the children better clothes, so they may be more respectable for Sabbath-school, and, if Providence smiles upon us with a good honey year, I may be able to have that luxury I have so long longed for—a small telescope to study the works of my Father above in the starry heavens."

The countenances of all are lighted up, as only such little comforts and luxuries can lighten them, and a happy looking forward is the result. The next year burr-combs, and daubing and killing of bees are much worse than usual, with the "regulation frames," while the supply dealers have found out that what they formerly pushed are not just the thing, so a change is inaugurated, and in his vexation over getting off his surplus, our bee-keeper resolves, that, come what will, he never will stand this thing any longer, so instead of the nice things which had been planned, the money from the surplus is all sent off again to get the thick top-bar frames, which will overcome the difficulty, and the use of which requires a general overhauling of all the hives in the apiary, if new are not bought.

Next, frames at fixed distances looms up, then a divisible brood-chamber hive, to lessen the cost of production, and so on, until the bee-keeper is obliged to put off his long-looked-for pleasures, year after year, and before realizing them Death comes and calls him away. This is not an overdrawn picture by any means, for all this has come under my notice as above described.

In the interests of poor, struggling humanity, I plead for as few changes as possible, and that none be made until after a trial of several years, to know whether such change is of advantage or not.

Borodino, N. Y.

SEASON IN EAST TENNESSEE—BEE-PARALYSIS (?)

BY H. F. COLEMAN.

The honey season in East Tennessee is just now closing, and in some respects it has been a remarkable season. In March, as all will remember, we had two extremes as to weather. In the early art of the month it was warm and pleasant, and the bees got into a rapid rate of brood-rearing, and then came a blizzard that not only set the bees back, but killed the poplar and other buds, and flowers that pro-

duce early honey. Bees and bee-keepers were discouraged, and many bees were suffered to die, and those that survived lived from hand to mouth until the blooming of basswood late in June.

Since the blooming of basswood bees have never done better, and have never been in better condition for winter, in my knowledge. Fully half of the season was a complete failure, but the honey crop is an average.

Is it Bee-Paralysis ?—I have noted with interest the answer of Dr. Miller to the question of R. T. S., on page 395. The Doctor thinks that the trouble with the bees of R. T. S. is bee-paralysis. To this I do not dissent, but it is not what we know as bee-paralysis in this section. Here we have this same trouble, every fall, and consider it no serious matter, and so far as I am able to judge, it affects the prosperity of the bees but little.

The difference between bee-paralysis proper, as we understand it here, and the trouble in question is this: In bee-paralysis the bees become hairless, slick and shiny, and the other bees carry them out of the hive while alive, with as much vigor as they do drones at the close of the season. In the beginning the diseased bees seem to be unconscious of their affliction, and continue to work. I have seen hundreds of them gathering nectar after they had become weak and tottery, and so slick and shiny that persons unacquainted with bees would hardly believe them to be bees.

In the trouble spoken of by R. T. S., the bees seem to get smaller, and never shed their hair, and the first indication of the disease, so far as my observations go, is the carrying of them out by the other bees in a dead or unconscious state.

Bee-paralysis proper, readily yields to the sulphur treatment, or at least that has been my experience, and the other trouble will get well of itself; but in cases with me, where I have any fears as to the result, I stimulate the queen by feeding a little sugar syrup until the disease disappears. Sneedville, Tenn.

ISSUING OF SWARMS—BEE-PARALYSIS.

BY J. A. GOLDEN.

I want to say to Dr. C. C. Miller that the first Italian queen I ever had was purchased of A. I. Root in the fall, and the following season I watched them very closely, for I was very anxious to have them swarm, and one morning they rushed out and I sprayed them as they circled around, and then they all went back. So I opened the hive, took out a comb, hung it on the comb-rack, and took out the second with the old queen thereon. I thought I would see how many queen-cells there were, and the third frame had a large cell with the cap cut off, and to my surprise a young queen came walking up the comb from the direction of the uncapped cell. There were but two cells; I cut the other out and introduced it into a nucleus, put back the combs with the queens, shut up the hive, and on the third day the old queen came out with a rousing big swarm. You see, Doctor, I was a novice, and thought that was the way bees did. Yes, Doctor, the young queen remained, and the old queen went out.

The other case occurred with a colony of Mr. Adam Smith, who is a bee-keeper, and 85 years of age, quite nervous, and lives on the second lot from me. I handle his bees for him mostly. Two years ago a swarm issued, and I was going to remove the old brood-frames to another hive, and hive the swarm back in the parent hive. You see it's a house-apiary, with stationary hives, and about the third frame I saw a queen and thought she hadn't gone out, and said, "Why, Mr. Smith, here's the

Honey & Beeswax Market Quotations.

CHICAGO, ILL., Sept. 17.—The honey market is quite active. We are getting good prices, considering the hard times, owing to the reported scarcity of crop. We quote: Fancy white, 15c.; No. 1, 14c. Extracted, 6@7c. Beeswax, 25@26c. J. A. L.

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 6@7c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27@28c.
R. A. B & CO.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

KANSAS CITY, MO., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Sept. 20.—The demand for comb honey is increasing, in a jobbing way, in spite of the continued warm weather. Both comb and extracted honey is arriving freely. We quote: Fancy clover, 1-lbs., 13@15c.; white clover, 12@13c.; fair, 10@12c.; buckwheat, 10@11c. Extracted, clover or basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 45@60c. per gallon, according to quality. Beeswax, 25@27c, C. I. & B.

CINCINNATI, O., Oct. 19.—There is a very good demand for choice white comb honey at 14@15c. Demand is fair for extracted at 4@7c., according to quality. Comb honey brings best prices now, when it is something new yet and comparatively scarce, and not at Christmas-time, when markets are generally overstocked.
Beeswax is in good demand at 22@27c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, MO., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat, 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6½c.; buckwheat, 5½@6c. Beeswax, 27@29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 448 for advertising offer.

FOR SALE.

An Apiary of 70 Colonies, mostly Carniolan and Italian, all with plenty of stores for winter. ⅔ of the hives are 1¼-story, the half-stories removed and filled with starter sections in Root's section-holders. The balance are 2 stories—all made for the regular Langstroth frame. Also 1 new Cowan 2-frame reversible Extractor, one 5-gal. percolator for making syrup by the cold-water process, and 1 Solar Wax-Extractor. All for $200. Reason for selling—old age and chronic ill-health.

Dr. C. FISHER, Denison, Tex.

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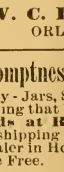

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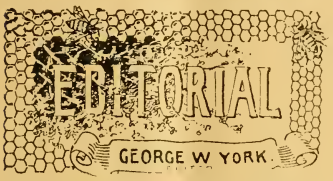


Dandelions are in bloom around Chicago now—Oct 30th—and have been for some weeks. At this rate, we may be able to truthfully say that "December's as pleasant as May."

The Perfume of Flowers is more clearly perceived just before or after a rain, because the air, then laden with a moisture, better conveys the essential oils that contribute the odor. So we read in one of our agricultural exchange papers.

The American Apiculturist has appeared for some months without a cover. It doesn't look familiar. Probably Bro. Alley wanted the "Api." to look more like the "American Bee Journal." All right, Bro. A., we have no patent on the cover-less-bee-paper idea.

Mr. A. F. Brown, of Florida, reported in "Gleanings" a trifle over 26 tons of honey from 193 colonies, 4¼ tons being comb honey mostly in 12-ounce sections. Five tons of the crop was "orange" honey, and 21 tons from palmetto and mangrove. Mr. Brown practiced migratory bee-keeping, and his crop averaged about 275 pounds per colony. Pretty good for a poor year!

The September "Review" was mainly devoted to a study of the disease known as "bee-paralysis." Nothing new was developed, but Editor Hutchinson asked those who have had experience with the disease to let him hear about it. The "American Bee Journal" has published much on this disease, but its cause and cure are still quite mysterious. Probably another season some new light may be thrown upon it.

Editor E. R. Root says in "Gleanings:" "Since I have discarded that editorial 'we,' somehow I feel more natural." Now the "we" seems more "natural" to us. How funny it would be to use the "editorial I" in the "American Bee Journal." "I" is sometimes egotistical, but "we" isn't. Now, there's a fine sentence—"I is" and "we isn't." But it's correct. Guess we'll stick to "we"—but let the "I's" have it, if they want it.

Eight Numbers for 10 Cents.—Yes, we will send the last eight numbers of the "American Bee Journal" for 1894, to any *new* name, for only 10 cents (stamps or silver). Now, here's a good chance to get some of your bee-keeping friends started in taking the "Bee Journal" regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have *three* bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the *last eight numbers of 1894*—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and

Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 578 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*

Mr. C. B. Bankston, of Chriesman, Tex., has been employed by Mrs. Atchley to work in her apiaries in 1895. Mr. B. is one of the many queen-breeders of the South, and will be a valuable help in Mrs. A.'s bee-yards.

The Van Deusen Foundation, as nearly all bee-keepers know, has flat bottoms to the cells. Heretofore the manufacturers have been putting it up in boxes holding 25 pounds each, but we learn from the "Review" that "another year it will be put up in smaller packages—as small as 6¼ pounds. Retailers are often called upon for small quantities, and the work of preparing it for shipment takes up a good share of the profits. The proposed plan will do away with this objection."

Tennessee Bee-Dealers.—One of our Colorado subscribers writes us as follows:

"Can you not induce some of the Tennessee apiarists to advertise in the "Bee Journal." I, as well as a number of my neighbors, want to buy bees for next May delivery, and I fail to see the advertisement of any one from there in the "Bee Journal." I hope to find the advertisements of a number of responsible bee-shippers in the "Journal" soon, from the State of Tennessee."

We are ready at all times to receive the advertisements of reliable bee-shippers from Tennessee or any other State. Come on with your advertisements.

A Half-Dozen Mercers are shown on a page of "Gleanings" for Oct. 15th. They're a fine-looking group — father, mother, and four healthy-looking, handsome sons. It's a good "ad" for California climate. They all live in Ventura.

Stingless Bees in Costa Rica.—Mr. Richard Pfau, of San Jose, Costa Rica, in a late number of "Gleanings," wrote as follows about the stingless bees in Central America:

In Costa Rica there are about five known kinds of stingless bees; but only two of them are valued for their honey, and are kept for that purpose in rough logs hung down alongside the verandas. One sort, called "jicote" (he-*co*-tay), is a handsome bee, nearly of the size of a German bee. Its color is a brilliant black, with five very narrow golden bands, which, to be discovered, need close attention; hence, its general appearance, which, at first, seems to be a brownish yellow, as compared with the bee of Yucatan, which probably is nothing but the same jicote, common all over Central America.

The jicotes build circular combs, with small hexagonal cells for the brood, and large pockets of blackish wax for the

Stingless Queen, Drone and Worker.

honey, which is taken off once every year. I always keep some logs with jicotes in the midst of my apiary of Italians; but all my trials to get them to work in a more civilized fashion in my dovetailed hives proved useless; neither have I much hope that some day hybrids may result, as the queen of the jicotes is very distinct from her majesties of other races, her abdomen being a large snow-white ball, full of eggs.

The other sort of stingless bees, called "mariaseca," is rather scarce, but celebrated here for its delicious honey, although to my taste it rather resembles Italian honey mixed with some syrup and plenty of water. The mariaseca bee is exceedingly small—scarcely larger than the head of an Italian drone, and it is leather-colored. Although in appearance the mariaseca seems to be very distinct from the jicote, its way of building brood-combs and honey-bags is nearly identical, except that the wax is leather-colored, and everything has much smaller proportions.

That Texas Bee-Meeting at Beeville, on Dec. 27th and 28th, promises to be a notable event for Southern bee-keepers. Mrs. Atchley is making extensive preparations, and looks for a big crowd. Mr. F. A. Lockhart, of Lake George, N. Y., expects to be there, and also other prominent bee-folks of the North.

More Convention Echoes.—On page 521 we gave a few comments on the St. Joseph convention, and now comes our friend Emm Dee with some more in about the same strain—though probably less "strained" than were ours. Here they are:

EMM DEE IN CLOVER HONEY.

Can I ever forget the glories of that bee-convention? It was my first love (of the kind), and I confess to being softly smitten. Had I known that Bro. York had such a surprise in store for me, I could scarcely have trusted myself to its enjoyment. But what can you do when embarked on the voyage? It's cowardly to turn back. So I followed my guide, and feared no danger.

We shipped on board of one of Pullman's schooners, and away we went. On our way we took on at least two other passengers—one short and stout, the other lean and tall, and I was dramatically introduced to each. Now, I had heard of, and read much after the party of the first part, and when I heard Dr. Miller's name mentioned, and looked him square in the eye, thinks I: Young man, you're not the kind of a chap I thought you to be; you're not so tall, but better looking; you're not "stuck up," as I expected, but a very agreeable companion, with a good open countenance (for pie!).

The six-footer I learned was Editor Hutchinson, and so clever was he that I actually occupied the same bunk with him the very first night. But, bless your heart, he wrapped himself up in those Pullman blankets, and so wound himself up in them that I—well, I got left, out in the cold!

But daylight came on apace, the gentle tones of the ebonized porter were abroad in that car, and I felt that the best thing I could do was to get up and rehabilitate myself in my modest attire, slip out to the wash-room, and let Dr. Miller, York and Hutchy snore away! And they did it to perfection. Barring a few loose nails and timbers of that car, I believe their united effort did little damage.

After early breakfast (which we did not have), we arrived in the city of Saint Joe-seph, Missouri, situate on the raging river of the name. We were escorted by a gentlemanly committee of bee-keepers to the convention hall, and it seems to me that in ten minutes every son and daughter in that select assembly knew each other as if acquainted for years! Thinks I, Verily this is the right sort of welcome.

And then began a system of questioning that would have driven a Philadelphia lawyer out of his town and State. Besides wanting to know where we were from, they immediately inquired concerning our families—of bees. Whether the circle had multiplied much, and if much honey had been hatched this season, and if Whatshisname's hive wasn't the dandiest in existence, and whether there was pollen enough scooped in to fill all the cells, and if the bee-bread was really an improvement on the baker's kind or not. As for me, I unhesitatingly replied in the affirmative to all these questions, recognizing that I was looked upon as the chief intelligence on these intricate subjects!

Well, by and by, pretty soon, up looms a man they called "President Abbott"—a very good looker, too; he gave a few raps on the table, and commanded order. Well, I swow! But then we sat down quite comfortably in great, big chairs, 'pears like stuffed with feather beds; and then the man that stood up laid down the law.

Up gets a tall, suggestive chap from Laclede, and down sits the other fellow. The Laclede brother, he 'lowed we'd come to hear about honey, and he didn't want any other kind of sweet'nin' in his'n. Then another pretty handsome feller from Canada, he had his say, and it was pretty good, too. Then the sisters present were asked their testimony, and they were mighty slick in giving it—why, say, to my mind they seemed to know a heap sight more than the men-folks!

Well, it ran along smooth enough, thirteen or seventeen trying to tell all about it at once, when, sudden-like, Father Root, who had been sitting alongside of a handsome sister all this while, got up and said he thought so, too. Only that he—he—well, I've forgotten his exact words, but his ideas were all right, though I didn't know what to make of his direct look at me when he said something about people not being just what they should be—or words to that effect! O I tell you, I got kinder spunky, but I didn't say much.

Then Dr. Miller he was elected to give us a hymn-tune, which he did, and he actually played the big music-box all by hisself! Then he gave us a Dutch solo, and after that he told us how nice the honey made

by the motbs was, and how king-bees could be turned into queens, or something like that. I think he got all mixed up on the subject, or maybe it was me that was just a trifle "off."

Now, what do you *think?* Not a soul in that convention asked *my* opinion in regard to those many and momentous questions! The slight sorter rankles in my bosom yet. Of course, a few of the more considerate availed themselves of my wise counsel regarding the proper food for bees, and as to the best time in the day to feed them—whether only morning and bed-time, or at noon, too. I was pleased to impart all the knowledge in my power!

But I am real glad I went to that bee-convention, if only for the pleasure of meeting the sweet sisters and big brothers. The nice blonde man from Canada told us folks what a grand time we could all have if we came to see him. So we voted to go there next year, and elected him President, so he could look out for nice accommodations. Maybe his house won't hold all of us, but Dr. Miller and I, and York and Hutchinson, can sleep up in the haymow, just as well as not.

Good bye, sisters, until we meet again.

EMM DEE.

Both are Asters.—Mr. Wm. S. Knox, of Dickeyville, Wis., writes as follows:

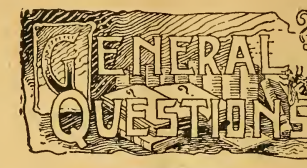
By this mail I send you samples of two honey-plants. Please name each, and tell their value as honey-producers. They grow mostly on places where the timber has been chopped off. Success to the "Old Reliable." WM. S. KNOX.

Prof. T. J. Burrill, of the University of Illinois, at Champaign, kindly replies to the above as follows:

These plants are both asters, and probably *Aster lævis* and *Aster cærulæ*, but it is impossible to be absoluteiy certain from the specimens in regard to the species. However, all asters are very much alike in regard to their honey value. I do not think this very great. Immense quantities of pollen are collected from them, and no doubt a fair amount of nectar.

The plant belongs to the sunflower family, of which there are an immense number of species, and among them some honey-plants. T. J. BURRILL.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

The Hoffman Frame.

Please give me your opinion of the Hoffman frame. I notice Mr. Barnett Taylor condemns it in an article on page 272 of a March number of the "American Bee Journal" for 1894. I want to use the self-spacing frame in full brood-chamber, if there is no better.

Gaylord, Va. E. E. A.

ANWSER.—Referring to the page you mention, it is easily seen that Mr. B. Taylor is quite positive in his condemnation of the Hoffman frame, and he is a man whose opinions I respect. He does not say why he condemns them, but if I understand him correctly, he condemns them because he likes the kind he is using better, and I suspect it is on account of the matter of ease or difficulty in handling.

I have had considerable experience with the Hoffman frames, as well as with several other kinds. Exact spacing seemed to be a thing out of the question with my old, loose-hanging frames, and among other self-spacing frames I tried the Hoffman. They gave exact spacing against which there could be no criticism, but after being in use for some time I began to dread having to open a hive containing them. There was so much prying and pulling to get out the dummy before getting out the first frame, that the old, loose frames seemed ever so much nicer to handle. The

whole thing was wedged up tight, all was glued tight, glue gradually accumulated, making everything tighter, and making my face redder each time I opened one of the hives.

Then I got some of the Hoffman frames with the V edge, against which edge I was strongly prejudiced, but after a full year's use, I must say that they are very nice and easy to handle. I don't wedge them at all, just push the frames tight together each time, and there's no trouble about picking out the dummy or taking out the first frame by simply pushing the dummy back. So I condemn the old Hoffmans, but I like the new ones better than anything I have tried. I would like still better to have no chance for glue.

Prevention of Granulation.

In a late issue of the "American Bee Journal" Mr. Doolittle gave directions for making a winter feed that will not granulate in the cells—5 pounds of honey, 30 pounds of sugar, and 15 pounds of water, I believe. Will granulated honey, liquefied as usually directed, answer for the purpose? E. B.

ANSWER. — I think the granulated honey will be all right.

Two Colonies in a Hive.

I am satisfied with my success in bee-keeping this year. I think I have done fairly well for a novice. I started last spring with two colonies of blacks in box-hives, and increased to six by swarming—all in frame hives. I got about 30 pounds of honey in transferring. The two colonies got no surplus, as "we" were swarming in the honey-flow, which was basswood this year. My neighbor, an experienced bee-keeper, started last spring with 3 colonies of Italians, and increased to 11 by dividing, and took 130 pounds of comb honey, and will not have to feed for winter. I have fed 15 pounds of syrup to two of my weakest colonies, and am through feeding except the hybrids.

I introduced two Italian queens last summer, one was received all right, and the other, after looking thoroughly for her six or seven times, I found a black queen in possession. I am sure there were no queen-cells or queen in the hive when I introduced her in the cage. I think she must have come from some other hive. It seems that such things do occur sometimes, as the above-mentioned neighbor in introducing some Italian queens on the combs years ago, when there were no other Italians in this part of the country, accidentally let one go, and after awhile found her in a colony of blacks of his.

What would be the probable result of wintering two small colonies in one hive, if a frame covered with screen-wire, and fitted so that no bees could pass, were placed between them? Would they likely be restless, or quiet, and like a large colony? The object would be economy of room, heat and feed, as I believe it is claimed that a large colony will winter with less feed in proportion to its size than a small one.

Belleville, Wis., Oct. 22.

ANS.—I've wintered many small colonies two in a hive, with a ⅜-inch board between them, and it works well. Whether wire-cloth would work the same I don't know, but I am inclined to think it would be all right. But you can't be sure till you try.

Changing Size of Hive-Entrance.

Should the hive-entrance always be the same size? If not, when should the changes be made? MISSOURI.

ANSWER.—As a matter of actual practice, I think most bee-keepers leave the entrance the same the year round, although those who winter in cellars and who do not give upward ventilation prefer to have the entrance much enlarged while in the cellar, even to taking away the bottom-board entirely. If there is any time when it seems profitable to lessen the entrance, I should say it is when first flights begin in spring, so as to save the heat as much as possible for breeding purposes.

Uniting Colonies—Moth-Proof Bees.

1. I have some more questions to ask. This week I united some of my weak colonies and caged one of the queens, and left the other free in the hive. What bothers me is, in one hive that contains two of the small colonies they

have a queen at liberty, one queen in a cage set between the frames, and queen-cells with an egg in one of the cells. When I looked at it yesterday, it was nearly ready to be capped over. What will be the outcome of this? Will the bees kill the queen that is at liberty in the hive, or not? I would not like to lose her as it is one I value highly.

2. By the way, you said I should keep pure Italian bees to keep out moth-worms. All my bees are the best Italians I can get, from such as Doolittle and Mrs. Atchley. If they are "no good," then I am sure I don't know where to get any that are.

3. One thing I have noticed, that the bees that I united fought a great deal and killed a great many. Now wouldn't it be better to unite them just as I am about to put them in the cellar for winter, or would you do it now, and let them fight it out until they settle down, as the one that I united has done?

Aurora, Ill., Oct. 18. L. S.

ANSWERS.—1. What made you leave a caged and uncaged queen in the hive? If you caged a queen so the bees would not hurt her, you were lessening her chances by allowing another queen in the hive. I have had bees kill their own queen for no other reason, I think, than that I had caged another queen in the hive to be kept till I needed her. So the caged queen would make the free queen's chances of safety less. On the other hand, if the bees should not kill the free queen, then the caged queen would stand a poor show when liberated. If you want one of the queens saved, kill the other. If a queen is caged in a hive, it is the common thing for the bees to start queen-cells, and it seems some of the bees friendly to your caged queen acted on that plan. If not too late, the best thing you can do is to destroy the queen-cells, remove the poorer queen, and cage for a time the other queen, if you think that is necessary for safety.

2. It seems to me the source from which your Italians come is all right, and unless there is a predominance of other blood worked in, the moths ought to be held at bay.

3. I think I would a little rather have the uniting done before going in the cellar. Following up some one of the plans lately given in the "Bee Journal," there ought not to be much fighting. Smoke 'em like sixty if they start fighting.

Pollen in Early Spring.

I am in a quandary again regarding my bees and know of no better source to go to for information than the "Old Reliable."

I was out bee-hunting the other day, and came to a bee-tree that had lately been cut and robbed of all the honey, leaving a good-sized colony of hybrids to perish, as it is too late in the season to get another store for winter; and when I happened to see that the queen was all right, I concluded to take them home and feed them on sugar syrup and see how I came out next fall with my investment.

I put them on 3 Langstroth frames of old combs and 2 of foundation. I made a feeder by tacking a piece of wood separator on each side of a Langstroth brood-frame, and put in a bevel-edged strip of wood for a floater to keep the bees from drowning. This they will empty in about three hours, and I should think it would hold three or four pounds of syrup. It is about 4x17x⅞ inches, inside measure. I place it at one side of the combs, and it seems to answer the purpose well.

Now, is it necessary for them to have pollen for brood-rearing next spring before pollen comes (I winter bees in the cellar)? If so, can I feed anything to supply it? If so, what and how? I looked in all my strong colonies for help, but pollen is scarce, and unless it is in the bottom of the cells and covered with honey, there is none to spare.

Bellevue, Wis. SUB.

ANSWER.—They will rear no brood next spring without pollen. You might swap one or two of their frames of stores for one or two from the other colonies, for most likely you would thus give them pollen, although you might not see the pollen. Or, you can wait till next spring, and then when the honey is eaten out you'll have no trouble in finding frames of pollen in the other hives, from which you can draw.

Have You Read the wonderful Premium offers on page 578?

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Getting Along With Cross People.

MRS. ATCHLEY:—As we Southern bee-keepers have now learned to look to you for advice on matters pertaining to bees, I wish to ask you what is the best way to get along with people that are always cross and trying to find something to accuse the bees of being a damage? It seems that some people get angry when everything doesn't go to their liking. Please answer in the "American Bee Journal." SUBSCRIBER.

Friend Subscriber, whoever you are, I will say that you have me in a tight place, to answer or give advice, and without more of the particulars it would be hard to prescribe for your case. However, you ought to know whether or not your bees are a real nuisance or damage to your neighbors. If so, I would remedy the matter if I had to move my bees, for I *do* love peace. Now, if your bees bother your neighbors at preserve-making time, I would furnish them with mosquito-bar or wire-cloth enough to cover or enclose the room, etc.; and, besides, take them a mess of honey occasionally, and this will usually sweeten people unless they are a lemon straight.

If your bees bother grapes, or whatever they do to annoy neighbors, try to remedy the evil. I've had hard feelings from people, or they thought hard of me, because my bees visited their stock-watering troughs, but I have *always*, so far, made matters right and satisfactory in some way.

Please bear with me a little right here. One of the worst things that has come up in my rounds was in locating out-apiaries. I almost always put my bees at or near some residence, and I have never yet, that I remember, had any one to make a charge for my bees being on their premises. Often I have asked what they would charge me, and the reply was: "Nothing at all." I would say, "Well, I will give you some honey to eat, anyway." These people knew nothing of bees, and thought where there were bees there was honey. If the season would open up badly, and continue so for a time, and I had no honey to offer them, I would feel ashamed to visit the yards, and actually I have bought honey and given it to people, when they thought it came from the bees at their place. And, oh, how it would please them! I would rather pay a moderate price for the use of space than to have it free—I would get off cheaper. I nearly always leave a colony of bees when I move the bees away.

Now, back to your questions, and I will close by giving my experience with ugly neighbors. It is this:

There are some things in this world not to our liking, which we cannot change. Much of our happiness, as well as usefulness, depends upon our ability to adapt ourselves patiently to disagreeable and troublesome things which are inevitable and incurable. The river cannot remove the mountain, so it gracefully flows around it; so we must patiently go around many things which we cannot remove.

This principle applies to our relations and dealings with the people about us. Some of them are uncongenial, disagreeable, provoking. Strive and fret ourselves as we will, we cannot change them. We must accept their peculiarities, and even their faults as inevitable, and adapt ourselves to them. People who have grown up crooked, are hard to straighten. We must learn to help people, and love them, and be happy in their society in spite of their peculiarities and defects.

Now, I trust that you may get some ideas out of this that will enable you to study those cross neighbors, and make them your friends.

JENNIE ATCHLEY.

Buffalo Clover.

MRS. ATCHLEY:—I see that you name buffalo clover as a honey-plant of Texas. Now I always thought so, too, but I have kept bees for three years, and for two years as a specialty, and have watched it closely, and I have not seen a single bee at work on buffalo clover. Now what I wish to know is, do bees work on it in some localities, of your

own knowledge? Please answer in the "American Bee Journal."

We have a plant in this county (Hill) of considerable importance as a honey-plant, that I would like to know the name of. It is a bushy weed, small leaf, grows from 12 to 18 inches high, and blooms from May 1st to 15th. The blooms are constructed something like the sunflower, only the center is more round, and as large as a half dollar. The outside row of petals are dark red. If you can tell what it is, please do so. If not, can you give me the address of some one who can tell me? I will send a sample to some botanist next spring, if necessary, and notify you of the result.

Abbott, Tex. J. D. PROSISE.

Friend P., I have had splendid yields from buffalo clover in Lampasas county, where I kept bees in 1884-85-86-87, and it bloomed there in May, and gave a fair crop, even in the driest year we had there during the three years' drouth. I do not know whether it furnishes honey only in certain localities or not, but I had supposed it furnished honey wherever it grows. Who else has noticed this clover in their localities? Buffalo clover belongs to the mint family, as do all plants with a square stalk

Prof. A. J. Cook, of Claremont, Calif., can tell you the name of the other plant.

JENNIE ATCHLEY.

About Royal Jelly.

1. How long will royal jelly keep good, out of the cells?

2. When it gets thick and hard, can it be used?

3. How much do you use in a cell?

Alliance, Tex H. L. BOLTON.

Friend B., I will answer as best I can.

1. I never tried how long it will keep, but it will soon become too tough and hard to be used for grafting.

2. I never try to use it when it gets old or turned yellow. I prefer to use jelly as thin as I can get it. Still, we often mix the thin and thick jelly together, when it is scarce, and it works all right. We do not now use the jelly plan from queen-cells—we move the larva, jelly and all, together, which is much better.

3. Only a small quantity is sufficient—say what would lay on the point of a small pen-knife. JENNIE ATCHLEY.

Great Premiums on page 5781

Bees Infuriated—What to Do.

Query 947.—1. What would you do, suppose the bees in your apiary had become unmanageable, by careless handling, accident, or otherwise, so that they would sting everything in sight?

2. Have you ever known such a state of affairs in your experience?—Illinois.

1. Run. 2. No.—P. H. ELWOOD.

1. I don't know. 2. No.—J. M. HAMBAUGH.

1. Subdue them with smoke or water. 2. No.—H. D. CUTTING.

1. I would probably feel like swearing. 2. No.—W. G. LARRABEE.

1. I would probably wait until they got over their fit. 2. No.—C. C. MILLER.

1. I would keep out of sight. 2. Occasionally, through carelessness.—MRS. L. HARRISON.

1. All would depend upon what was the trouble. 2. I never had any bees that were unmanageable from any cause.—E. FRANCE.

I have never had such a case. I should use smoke, and if that failed, use a bee-tent, which always subdues even the most vicious.—A. J. COOK.

1. I would let them alone until they became quiet. 2. I have had a case or two of that kind with single colonies, but their fury was of short duration.—M. MAHIN.

1. Leave them severely alone for two weeks, and they will forget all about it. If not more than 100 to 200 bees did the stinging, kill them with a paddle at once.—G. M. DOOLITTLE.

Leave them alone as much as possible, and when handling them, smoke thoroughly. Moving the hives might do some good, as some of the old bees would be lost.—DADANT & SON.

1. I would give an upper story with wire or cloth top, then shower them all in and close the entrance with wire-cloth in the day time, and open it at dark. Keep the hive well shaded, and the en-

trance darkened during the day. Adjust all entrances to about four inches, or less if that much is not needed for free passage of the bees in and out. 2. Not in my own apiary.—MRS. J. N. HEATER.

1 and 2. I have never had such an experience, and can't imagine how such a state of things should arise. In such case, I should either kill the whole colony, or re-queen it.—J. E. POND.

1. I'd keep out of their reach, and send the children in the house. A big smudge might help. 2. No. Something is wrong somewhere when such a state of affairs exists.—EUGENE SECOR.

1. Stop "careless handling;" guard against "accidents;" look out for the "otherwise;" feed each colony late in the evening—if their pasture is very poor. 2. Not in any well managed apiary.—J. P. H. BROWN.

1. I would get everything out of "sight" as rapidly as I could until the bees cooled down. 2. Yes; it was caused by the jarring of the earth made by the use of a road scraper in the neighborhood of the apiary.—R. L. TAYLOR.

1. I should use the smoker and the fountain pump the best I knew how. If salty water is used in the pump, it will help to secure quiet. Of course the best plan is not to provoke such a condition of things by carelessness. 2. Yes.—EMERSON T. ABBOTT.

1. Keep away from them as far as possible, until they get over it. Use plenty of smoke. Find out if possible which colonies are doing the stinging—usually there are not many—and see that they are subdued. 2. To a limited extent.—J. A. GREEN.

As I have never known bees to get that way, I am of the mind to answer as the young physician did on examination: "What would you first do in case a man had been blown up by an explosion?" He replied, "Would wait until he came down."—JAS. A. STONE.

1. If near night let them severely alone, and after it has become dusk, and they have quieted down—remedy the cause. If early in the day, I would contract entrances to every hive, and introduce a little "feed" into the *inside* of the disturbed colonies; if necessary, cover them up entirely.—W. M. BARNUM.

1. Prevention is better than a cure, but if the thing has happened, and they are endangering the lives of animals and folks, terrify them with smoke. They will respect this when they will nothing else. Get so much smoke around them that they can't recognize themselves or the hives. A bee is not likely to sting unless it does it soon after leaving the hive. 2. Yes, I have known it, and known of it to such an extent that it would be hard for me to fix the distance from dwelling-houses and highways at which it would be absolutely safe to establish large apiaries.—S. I. FREEBORN.

1. An ounce of prevention is worth more than a pound of cure in such case, but as such a condition may happen, it is well to consider what is best to do. I should lose no time in getting the smoker going, and give every colony showing unusual activity a good dose of smoke. 2. No.—C. H. DIBBERN.

1. Leave them entirely alone for a few days until they forget the cause of their irritation. Then handle them gently until they get all right. 2. Yes, nearly every season my bees, or rather a part of them, at times, get cross and handle badly. But in a general way I have no trouble with them.—G. W. DEMAREE.

I would let them get over their excitement by keeping all sweets out of their reach about the apiary. It is never safe in a large apiary to leave honey exposed except during a good honey-flow. To stop their stinging, smoke each hive with tobacco smoke just before dusk. 2. I have had them to sting everything in sight, but tobacco quieted them.—G. L. TINKER.

1. I would begin at once to handle in a careful way, using smoke so as to keep the bees always subdued. I would never leave a colony I was working with until it was thoroughly subdued. I would then re-queen as soon as possible with gentle Italian queens. 2. Yes, I have known bees to become so cross from bad handling that they drove everything to shelter.—B. TAYLOR.

1. I would light the smoker, and go into them and right all wrongs as quickly as possible. In case of accident, clear things up quicker, and let them quiet down. 2. I have many times had accidents—hives bursted, etc., also bad cases of robbing by bad management, but I have always as yet managed them. I know it tries one's patience in such cases, but I think we should always try to remedy the evil in as quiet manner as possible.—MRS. JENNIE ATCHLEY.

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PROCEEDINGS

OF THE

Twenty-Fifth Annual Meeting

OF THE

NORTH AMERICAN BEE-KEEPERS' ASSOCIATION.

BY FRANK BENTON, SEC.

[Continued from page 530.]

The following discussion took place after the reading of Mr. Rouse's essay on page 530, entitled,

Profits in Bee-Keeping.

Dr. C. C. Miller—I have not sold my crop yet (1⅛ ounces per colony), so I don't know what the profits will be.

A. I. Root—Since starting for this convention I have heard a great many reports from bee-keepers, and we have had correspondence with many other bee-keepers, but I have heard very little said which will lead one to believe that there are very large profits for the bee-keepers in the United States. I remember a supply-dealer in Ohio remarking: "Say, Mr. Root, there's just one question I want you to answer: Do you think bees are ever going to pay one as they used to pay?" If I am not mistaken, a good many of the friends are asking if bees are going to pay again as they used to pay. Well, before you get discouraged and join in with the ranks of those who do not think bees are going to pay, let me say a few words to you. There are some people who say that grocery-keeping don't pay, and there have been people who said farming did not pay 50 years ago. I cannot remember 50 years ago, but I can remember *nearly* 50. The world has gone on with its ups and downs. If bee-keeping does not pay, what will? Is it the trouble of the season, altogether, or the bee-keeper? There is a young man within two miles of our apiary, having 300 or 400 colonies. I ran out that way on my wheel a few weeks ago, and Ernest told me I had better go and see him. We had quite a little talk, and, to my surprise, he had a crop of honey last year, and he said, "I have had a good crop of honey ever since I have kept bees." Now you may say he had a good locality, but he has not—no better than others. We have pretty good basswood and willow. He is not in a very good locality, but he has lots of faith in the great God above. My friend Grimm, there, looks happy. The Grimms have always made money, and always got honey, I guess. Now friends, there have been some bad seasons. We have been traveling in Missouri, and while I have been travelling I have been looking over your State, and I have been sorry not only for the bee-keepers, but for the farmer, and when we feel sorry for the farmers we ought to feel sorry for the grocers, and when we feel sorry for the grocers we have to feel sorry for other people, and so it goes on. Some of the hotel people charge 75 cents for breakfast. I do not go there, and so I feel sorry for them, too. I feel certain that there are some places in Missouri where they have fair crops, and I have been told in some places that they did not get any honey. Now I wish all of these local things would come out. I do not want to be all the time looking on the dark side, but I want to look on the hopeful side. I know that there are some good times coming even for the bee-keepers.

Dr. Miller—Mr. Root always, under the pretense of encouraging us, says some discouraging things. There may be a man right by you who has a good crop of honey while you have none. This is as much as saying that you failed because you have not got faith in God. Now, there may be something in that, but I do not think that is the whole cause of the failure. There is a good deal in that, that others are having crops, but it is not true that some of us fail because we have not got faith. I *know* what I know, if I don't know much, and I do know that I have got faith in God, and this year I have had a bitter failure. It is true that not over 20 miles from me I spent a night with a man who had a fair crop. There are those things going on all about us. I do believe this: If we do not know of any reason why we are having these failures, we have the right to expect that, in the course of time, things will come about so that the crop will come to my place, and if it does not come this year, perhaps it will come the next. If it pinches me so hard that I have to do something else to make a living, I will do it. I am not discouraged. I am not working for that. This last year has been the happiest of my whole life. Every year is happier than the one before it, and I am expecting it to keep on as the days come, and I will be happier every year. We may expect the honey crops to come back any time. I expect the crops of honey to come back again.

C. Grimm—I will admit that there is not as much profit in bee-keeping as there was years ago. There was a time when bees could be sold for $50 a colony, and honey, that is, the comb honey, sold for 50 cents, and extracted, for about the same. And my brother sold queens from Italy at $20 apiece. There was then a good deal of profit, and my brother made in bee-keeping about $50,000 clear money. There was no question about it. He had it when he died. I made a little money, but I was not "in it" as he was. We shipped honey by the carload to New York, two or three carloads at once, but we lost money on that. At the present time, when you have to sell a good colony of bees for $5 in the spring, it is rather low, and honey at a shilling a pound is not much money. I am not discouraged. My wife has told me a good many times to give up bees, but I don't intend to do it. I will keep it up all my life. I think it is a good business.

R. F. Holtermann—I think that as Mr. Root and Dr. Miller said, there are conditions under our control, and others not under our control, in connection with our failures. It appears to me that every season we find more and more that there is a premium on understanding our business, and in using that understanding in the right way. One man cannot do another man's thinking. In the past season I have gone through Ontario, and I do not know how the season has been with you, but with us the season has been good. The bees built up strong. Then we had wet and cold weather so that in every instance the queen stopped laying entirely, and then the drones were about killed off. In a season like that I found that those men who practiced stimulative feeding to keep the queen laying, had very strong colonies, and secured far better crops than the men who did not do it. I am one of those men who say I do not believe in stimulative feeding, but this last season was an extraordinary one, and under those conditions it was necessary. The difficulties are greater at the present time, but we are still able to secure and make a living. We find people in all directions claiming that one thing does not pay, and another thing does not pay, and that it does not pay to do this or that, and go from one thing to another. What little experience I have had, I think it pays to stick to one thing. The men who were careful in bringing their colonies through the winter, and watched out in the spring, are going to fare better than if we had had a really good spring. In regard to our profits, we are making a great mistake in trying to enlarge our markets. We should produce a good article and put it before the public in the right way, and we can increase the consumption of honey in our own territory very considerably, and before I go away I hope I may show you a copy of a paper that devoted a whole page to bees and honey in the Toronto Exposition. If that was done throughout the country, we would find a greater sale for our honey, and better prices, and we could increase our markets at home.

Spring Stimulative Feeding — Breeding for Color.

Dr. Miller—I would like to ask Mr. Holtermann how much he thinks was the advantage of stimulative feeding last spring.

Mr. Holtermann—Before I answer that question, I would like to say I am one of those people who have condemned stimulative feeding, but under these conditions I am sure stimulative feeding gave fully 30 per cent. more in honey. I don't know exactly, but I think there is that much of a gain. The weather was cold continuously for three weeks every day, and wet; there was no honey coming in, and the colonies would probably have starved unless attended to in that way. There was very little honey and much brood, and not much uncapped stores. This continued for at least two or three weeks. The queen ceased depositing eggs, and in this condition stimulative feeding was of great advantage.

F. H. Richardson—What flowers were your bees gathering from?

Mr. Holtermann—The early flowers, of course—clover. I am one of those who have taken the stand that I want to get all the bees I can before the early bloom comes. Some say that they do not want to get bees strong before the honey comes. That is absurd.

Mr. Root—Mr. H. R. Boardman told me he was pretty sure he would have no crop at all unless he fed his bees with sugar syrup until up to the honey-flow. He would have the brood-chamber well filled so that all surplus honey that came must go into the sections. He crowded his brood-combs so full of feed that the bees had no other place to put the surplus. He had about two tons, mostly from basswoood, and in his opinion if he had not fed them as he did, he would not have had any crop at all.

Mr. Richardson—Stimulative feeding

under certain circumstances and conditions will undoubtedly pay so far as my experience goes, but it is like other things connected with our occupation, that is, it is rather risky. Sometimes it will pay, and sometimes it will not pay. Sometimes you feed and build colonies up strong until about white clover time, and then you have no crop, and the bees will undoubtedly starve unless you look after them pretty closely. What I am keeping bees for, and what I am in the bee-business for, is the dollars and cents, and I expect to stay in it. I have 160 acres of corn, meadow, etc., and I would hate to tell you what I have got off of it. I am not going to throw up farming just because I do not get anything at all, and I am not going to throw up bees because I do not get any honey. I do not believe any amount of faith will put honey in the pail when it is not there. I have bees that are going to get honey if there is any. I have not had any honey-flow since I have been in bee-keeping. But I am going to build up my business just as fast as I can.

Frank Benton—I have contended for very many years that stimulative feeding is at the bottom of all success in bee-keeping. But it is only with myself that I have contended—have tried to consider the matter from all standpoints and subject it to careful experiment, because there have been so many against me, some of them especially being those with whom a controversy once entered upon would be never-ending. I believe that to obtain the best results it is necessary to stimulate whenever bees are not gathering honey and yet can fly out for exercise. I would have a prolific race of bees, and I would have the choicest and most prolific queens of that race. A prolific queen is the corner-stone of success. Whenever bees are not gathering honey, and the winds are raw and cold, I would still stimulate them, but this can be carried too far. Whenever in the middle of the season an important yield of honey is anticipated it is easy by stimulative feeding to get the hives crowded with bees ready for that harvest. After that it may, or, according to circumstances, it may not be profitable to stimulate them. If no honey comes in for a time, so that brood-rearing ceases, and if it is still possible to rear workers in time for a fall flow, by all means resort to stimulative feeding if the time can be found to attend to it. Or if the colonies have become reduced too much during the last honey-flow, the remaining bees being mainly old ones, it will pay to stimulate some even though no fall flow can be expected. They will be in better condition for winter. To illustrate: the past summer from about the first week of July to the end of August my bees brought in no honey. My time would not permit me to go all over them and stimulate them regularly, but it would have paid me 100 per cent. to have done so. They had honey in their combs, in fact many of them much more than they needed, for I had been otherwise too busy to remove all they might have spared, knowing I would not have time to feed regularly. Yet I know as the result of repeated experiments along this line that it would have been a profitable undertaking to have stimulated brood-rearing by frequent feeding. What comes in daily is, in general, during mild or warm weather, what regulates the amount of brood a given queen will produce. Few colonies will draw much on their sealed stores to keep up brood-rearing. If the workers have passed through a harvest, they dwindle rapidly after that, and their places must be supplied by others, else the colony is in no condition for another honey-harvest that season nor for the winter, especially if they have much time to fly out and get reduced before cold weather commences. In September we had a moderate yield (chiefly from wild asters), and just those colonies which had been stimulated occasionally during the long summer drouth and honey-dearth, stored more than the others—many of them four or five times as much. They were so much stronger in bees they could send a force into the fields. I am sure the *immediate* return in honey from my bees would have been greater had I not increased my colonies beyond such a number as I could have stimulated regularly during the summer. But I have shown my faith in the future profitableness of bee-keeping by increasing my apiary until it numbers 140 colonies. In this connection I wish to make one other statement. I have kept bees from my childhood, and for more than 20 years have engaged in this business exclusively; my experience has, moreover, been in several different States of the Union, and in a number of foreign countries under conditions of climate and pasturage which have differed very widely from each other, having been located in tropical, again in sub-tropical, northern and Alpine regions, yet when my colonies have been in excellent condition—such as they can always be kept up to by feeding at the proper time—I never yet experienced a season when they did not gather enough to last all

winter, and rarely one which gave no surplus. My experience is, that, by paying very close attention to the selection of queens, and by having an exact knowledge of what I might anticipate in the way of blossoms which ordinarily yield honey, and by having the bees there whether any great harvest came or not, in the course of the year they have always found a yield; and whenever I fail to stimulate part of my colonies, and the natural sources fail to secrete enough at all times to keep brood-rearing going on from spring until fall, the difference in the condition of the colonies, standing side by side, seems to be in favor of those I have stimulated, by 50 per cent., hence I believe that on this account alone stimulative feeding pays.

Mr. Richardson—I would like to know what we put in the honey-buckets: it is honey, isn't it? I have been riding around to see some of those queen-breeders, and they have led me to believe that it was "color" that I wanted to put into the honey-buckets. I would write to this one and say, "I want a queen; what have you got?" And they would reply, "I have got some beautiful queens that are all yellow." They do not say whether they get any honey or not, but they say that the queens are all yellow. They say if you are not satisfied with that, you don't have to buy. I don't care whether a bee is as black as my hat. I have had queens from bee-dealers that I would not give a cent for a thousand of them. They were of no use I have not got a black bee in my apiary, and I never have had. I don't want to be understood that I want black bees, because I don't, but what I do want is a bee that will get the honey when there is any honey to get. You give me a queen that will give me 180 or 190 pounds of honey every year, and I will stand it if their sting is a yard long.

Dr. Miller—So far as we have gotten, it would seem to prevail either that stimulative feeding is a good thing all of the time, or that it is a good thing some of the time. I would like to know something about this matter. I would like to have those who don't approve of stimulative feeding, tell us the harm in it. Tell us the bad time to stimulate, and the harm in it.

Pres. E. T. Abbott—I would like to say something about those yellow bees. The tendency to yellow is sporty. Every one that has raised chickens, for instance the Golden Wyandottes, where the color is yellow and black, knows there is a tendency to extreme yellowness or to extreme blackness. This splashing of yellow denotes sporty chickens. It simply indicates that it is a mongrel. You mix Cyprian blood with Italian blood, and you will get yellow bees for four generations. If I may be allowed to use the expression, we want the "feathers" of the bee distinctly marked, the same as in the chicken. It is a mistaken idea that all yellow bees are sports, and not good breeders, but some of the queen-breeders have got the idea that the bees should be yellow all over, and that is all that is necessary.

Dr. Miller—Let me ask you: Suppose you have Italian bees which you know are pure, and there are nothing but pure Italian bees in your locality, I would like to know if you go on breeding from these alone what will be the tendency in regard to the color. Will they stay the same?

Mr. Abbott—The tendency of imported bees is to become lighter all the time. Every generation will make them a little lighter, but the markings will be the same. The color would be lighter, but there would be no change in the markings.

Dr. Miller—I would like to have an answer to my other question. Some say that stimulative feeding is a good thing, and others say that it is not. I would like to know how that is.

Mr. Holtermann—I can answer that, I think. It is objectionable at all times, possibly with a few exceptions. There are some bees after the basswood flow that do not get anything, and as the bees are getting old, it is a good thing to stimulate them to get them to care for the brood. I don't think it is a good thing to stimulate them early in the season, because they get too much brood in the hives, and unless the hives are protected when cold weather comes along, the brood will chill, and harm is done in this case; but one man cannot judge for another, and in my locality the bees get enough naturally to keep the queen laying as rapidly as the bees are able to take care of the brood. Just before the cold spell came on, the bees got a good deal from the fruit-bloom, and they were assisted very much, while others were not. My hives were clogged with bees, and if I were to stimulate them I would clog the brood-chamber.

Mr. Richardson—Now in regard to that color question. I was talking to a queen-breeder the other day, and I said to him, "I want you to answer a question about these bees. You have been breeding them, and I want to know just what you think of them, and he says,

"Well, I will tell you, they are not much good, they are too short-lived."

John Wier—In regard to those yellow bees. I have some of them in my apiary, and they have secured upwards of 50 pounds per colony, and the yellow bees have done the very best for me this year, and have done the best on red clover, better than any other bees. I have yellow, three-banded, and black bees, and I think my yellow bees have done the very best this year.

J. Schumacher—I have been handling Italian bees since 1866, when I reared my first Italian queen. I sent for a 5-banded queen seven or eight years ago. The first one I got I reared queens from, and they were 5-banded. The yellow bees are better workers by one-third, and they are longer-lived and gentler. I reared about 50 queens last year, and about 25 this year, and I was sorry that it was not so that I could rear more. I got some that did not give satisfaction, but I would not give them up for the 3-banded or the common Italians. I prefer them over all others.

Mr. Richardson — There is just as much difference in bees as there is in anything else. I can get 3-banded queens that I would not have on my place, and I can get other 3-banded queens that are worth $10 of my money, and I would rather pay $5 for a queen and know what I am getting than to pay 75 cents and have to take a queen that is bred altogether for color regardless of everything else. I would like to hear from some who are not queen-breeders, and who have used both kinds.

The convention then adjourned till 2 p.m.

(Continued on page 622.)

Those New Subscribers, that you have long been thinking of getting, are very likely ready now to give you their names. You know that besides "throwing in" the numbers for the rest of this year to new subscribers for 1895, we also give each one of them a free copy of the 160-page book. "Bees and Honey." Yes, and we will give you a premium for getting the new subscribers, as you will see on page 578. Better at once "get after" those bee-keeping friends of yours, and secure their subscriptions, so you can send it with your own renewal before the end of December. To double the present list of readers of the "American Bee Journal" will mean more than a doubly better paper for all. We can guarantee that. If each subscriber sends only one new name, the thing will be done. Will you do it?

Have You Read page 578 yet?

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Nov. 10.—Western Washington, at Tacoma.
G. D. Littooy, Sec., Tacoma, Wash.

Nov. 13, 14.—Illinois State, at Springfield, Ill.
Jas. A Stone, Sec., Bradfordton, Ill.

Nov. 14, 15—S.W. Wisconsin, at Montford, Wis.
A. A. Arms, Sec., Hurlbut, Wis.

Nov. 21, 22—N.E. O. and N.W. Pa., at Corry, Pa.
Geo. Spitler, Sec., Mosiertown, Pa.

Dec. 5.—Central California, at Hanford.
J. F. Flory, Sec., Lemoore, Calif.

Dec. 6.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec., Steel Creek, N. C.

Dec. 18, 19—Northern Illinois, at Rockford, Ill.
B. Kennedy, Sec., New Milford, Ill.

1895.

Jan. 9.—Indiana State, at Indianapolis, Ind.
Walter S. Pouder, Pres., Indianapolis, Ind.

Jan. 21, 22 rada State, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Jan. 30, 31.—Vermont, at Middlebury, Vt.
H. W. Scott, Sec., Barre, Vt.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

——. ——.—North American, at Toronto, Can.
Frank Benton, Sec., U. S. Dept. Agriculture, Washington, D. C.

☞ In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

OFFICERS FOR 1895.

PRES.—R. F. Holtermann.....Brantford, Ont.
VICE-PRES.—L. D Stilson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson...Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

Illinois Convention Reports.—The Illinois State Bee-Keepers' Association still have a good many copies of their Second Annual Report on hand, and no postage to send them out. Any one sending eight cents in stamps to pay postage and wrapping, will receive a copy of same by mail; or seven cents in stamps will pay for a copy of the First Annual Report, if any one desires it. Address, Jas. A. Stone, Sec., Bradfordton, Ill.

DEEP FRAMES VS. STORIFYING.

A Possible Compromise Between Eight and Ten Frame Hives. Locality Not Enough Considered.

BY F. L. THOMPSON.

On page 367 of "Gleanings," the editor suggested increasing the capacity of the 8-frame hive when desired by adding another 8-frame story. I tried the scheme on about a dozen colonies the past season, adding the additional stories about May 1st. At the opening of the honey-flow more than half had considerably more brood than they could have had in a single 8-frame story. One had 12 frames of brood, one 11, and two or three 10, while the average could not have been less than 7, and was probably more. But such hives are very cumbersome to look into, or to handle in any way as a whole. Storifying with half-depth frames throughout would be better.

I experienced one objection to storifying, however, which I have never seen stated in print. In raising up an upper story, I broke open as fine a queen-cell as I ever saw, which had been built so as to be fastened to frames in both stories, I found the queen failing, and not another cell in the hive. Later another cell was started, and a queen reared, but egg-laying was suspended for some time, and the colony is not now so strong.

These colonies were given work to do in building brood-combs by inserting empty frames after the flow had commenced. I do not see how they could profitably be used for comb honey. The average capacity of a queen, when the flow is not too early, may exceed that of an 8-frame chamber, but cannot attain to a 16-frame one. Some of the crop would have to be in the form of extracted honey, and the bees would be loth to go above. For producing both comb and extracted in the same hive, shallow extracting-frames would be much better, so as to allow of tiering.

Now this experience of mine with vertical expansion is in line with what Mr. W. C. Frazier says, on page 546 of "Gleanings:" "A colony will do about as well on 8 as on 10 Langstroth frames, and I don't know but they will do better, as a 10-frame colony's brood-nest is in the wrong shape. But make the 8-frame hive the same capacity as the 10-frame, by adding two inches in depth to the frames, and they will rear as great a percentage of brood in it as they did when it was only the Langstroth depth." I have been waiting with much interest for the veterans to arise and say either "Them's my sentiments," or "Fiddlesticks," on this point. Surely, it is an important matter. Just think of it—with a frame 11¾ inches deep, there should be over ¼ more brood, at the same time of year, with the same queen, and the same bees! But even the editor did not bestow a foot-note upon it. I

wonder if there is a hitch somewhere. Possibly there would be a slightly greater amount of sealed honey at the top of the frames to make the bees unwilling to enter the sections. Still, that would contradict Mr. Frazier's assertion of as great percentage of brood. It would pay to look into this. Some points might be brought out which would tend to clear up that perpetual mystery which is worrying Dr. Miller—why they should get big crops down at Hamilton. Then, too, it might settle the vexed question of "section honey" in the side frames. There would be no reason for grudging a 10-frame colony 10 pounds of white honey in the side combs of the brood-chamber, any more than to grudge 8 pounds to an 8-frame colony, if the former had reared a correspondingly larger amount of brood, which would put 50 pounds of surplus above instead of 40.

It is only fair to mention that the Heddon hive fulfills the condition of 8-frame width with 10-frame capacity; and those who run big apiaries, and who handle hives instead of frames, need look no further; but there are some of us (and I think there always will be) who prefer to handle frames instead of hives; and 8 frames, in one story, are certainly easier to handle than 16 frames in two stories.

But, for the present, let us imagine that Mr. Frazier will be proved to be correct. What follows? That the Langstroth frame should be superseded by a deeper one.

Three objections may be urged: Deeper frames could not be so easily handled; deeper frames would not be interchangeable with extracting frames, or if they were, the latter would be too large; deeper frames would not be the standard size. The first two sufficiently account for the prevalence of the Langstroth over the Quinby size, without supposing that there is something mysteriously superior about it.

Answers:—1st. I have tussled with Dadant frames of the ordinary hanging type, and want no more of them. But we are getting smarter now, and may get smarter yet. I don't think this objection would amount to much if the frames were the latest style Hoffman (they would have to be wired, of course); and I know it would not if they were Aspinwall frames, as I have had an Aspinwall deep-frame hive on trial this season, and taken solid comfort in it. (Closed-end frames, too;—take notice, Dr. Miller.) Incidentally, it may be noticed that the Aspinwall hive may be contracted without division-boards or dummies—one objection to 10-frame Langstroth hives.

2nd. The greatest good to the greatest numbers: most of us produce comb honey; and quite a respectable array of authorities favor shallow frames for extracting supers.

3rd. This is indeed a terrible objection to encounter. I may be annihilated, but I will try it. In the first place, is not the length and width of the chambers of more importance in preserving the standard than the depth of the frame? Then, though it might not pay to make it even a minor change like this all at once, or to make a change at all if we have all the hives we want already, that ought not to stand in the way of future perfection. If we cannot do what we think best now, suppose we imagine what it may be possible to do a hundred years from now, and begin to work toward it. To cling to a standard because it is a standard, though it may be a strong argument, is never a sufficient one. Looking at it from that point of view—considering what is absolutely best—it seems useless to try to settle on one depth of frame. There ought to be two—shallow and deep—because each has advantages which the other has not. Some one has said that the Langstroth is a happy medium between shallow and deep frames. If a medium always retained the advantages of the extremes, that would close the argument. In this case it does not, and would do so still less if what Mr. Frazier says is true.

The cubical contents of hives has been the bone of contention hitherto; now let

us see what the shape has to do with it. If it is really true that a hive is possible which will combine the advantages of the 8 and the 10 frame, and be better than either without storifying, it should not lightly be passed by because it would not be the standard size.

And it is really important that the question should be discussed without reference to a standard, for some of us will kick over the traces anyhow (witness Dadant, Heddon, Tinker, and a crowd of lesser lights), and we want to know all the bearings of the case. The answers to Query 926 *seem* very authoritative; but put it this way: Suppose there was no standard, how many would have settled on 17⅝ by 9⅛, or nearly that? I strongly suspect that although the querist did not add the words, "and taking into consideration the desirability of conforming to a standard size"—he probably left out that condition purposely—yet nearly every one of those who answered mentally supplied them. And then, how much authority can we attach to the answer of a man who has had little or no experience with other sizes? The very fact that the Langstroth is so prevalent, proves that few are competent to consider the question of absolutely the best size. In fact, there are plenty of indications to show that this claim of Mr. Frazier's is nothing new, but has been known all along to a few of the best apiarists; and that it has probably only been prevented from receiving recognition because of the reverence paid to the standard. That is all right, but it may be carried too far. Rest assured that some time the absolutely best will be the standard. "Progress" is the watchword of the day. Ours is not a Chinese civilization. We had better yield gracefully while we may. That once admitted, there is plenty of room for discussion as to how fast to change. If it seems best to go very slow, so be it.

Mr. Dayton has an article bearing somewhat on this subject, from the honey-storage point of view, on page 173 of Vol. XXVIII of the "American Bee Journal." He comes to the conclusion that small hives are better *when the Langstroth frame is taken as a basis.* That really leaves the question unsettled.

Mr. Doolittle's article in the July "Review," shows that he has settled the question for himself without considering the shape of the brood-nest as an important element—or the standard frame either, for that matter.

It will be found interesting in this connection to read, in "Dadant's Langstroth," paragraphs 302 (with Fig. 60) to 307 inclusive, some additional arguments in favor of the Quinby size. But this precise point of Mr. Frazier's is nowhere touched on, in this book or any other, so far as I know, unless it may be indicated in the words which I have italicized from paragraph 307: "We have used on a large scale Quinby, American and Standard Langstroth sized frames for years, and have obtained better results from the Quinby, both for wintering out-of-doors, *and for honey-producing.*"

Note, too, that H. D. Cuttting says in reply to Query 926: "I have had the best success with a frame a little shorter and *deeper*" than the Langstroth.

If the Dadants would favor us with their views on this matter, it would be helpful. Their use of 10 frames instead of 8 implies that they would not altogether agree with Mr. Frazier.

There is one criticism I would make on the recent 8 and 10 frame discussion in "Gleanings." There is never enough said about locality. A remark is dropped about it here and there, but not enough to keep the unwary from being misled. It seems to be taken for granted that all the readers of "Gleanings" have a white clover flow. It is admitted, I think, by those competent to judge, that there are parts of the country in which a 10-frame Langstroth is better than an 8-frame, whatever may be their opinions in regard to the locality in which they are. Mr.

Hutchinson prefaces his recommendation of 8-frame hives with the words, "When the flow is early and short." That condition, or an equivalent, should never be omitted.

To put a home question—if you are selling hives to a customer living in a region of protracted flow, would you advise him to take 8-frame hives? But that, in effect, is just what the catalogues of supply dealers usually do; and that is the conclusion a beginner would probably come to, no matter where he lived, if after reading the recent discussion the 8-frame arguments seemed to him to prevail. Harm has already been done in this way. Arvada, Colo.

BEES AND FRUIT—BEE-DISEASES.

BY PROF. A. J. COOK.

(An essay read at the recent Farmers' Institute, in Santa Barbara, Calif.)

There are a few facts regarding bees which are not generally known, and which ought to be understood and appreciated by all, especially in a region where fruit-growing is the leading industry.

Bees never injure plants while in bloom; indeed, the blossoms exist for the very purpose of attracting the bees, and without the bees or other sweets-loving insects to pollinate the flowers, many of our most valued fruits would fail to produce. I have proved conclusively the present season that some varieties of plums, cherries, pears, oranges and olives are wholly sterile to their own pollen, or to pollen of the same variety of fruit, while other varieties are largely so. Apricots and navel oranges alone, of all the fruits I have experimented with, were entirely fertile with their own pollen.

It is true that other insects than bees will do this work of pollination; but no other insects can be depended upon. Seasonal peculiarities and insect or fungoid enemies may so deplete—often will so deplete—the numbers of other sweets-loving insects that they will be wholly inadequate to this great accomplishment. Bees, if in the region, can be surely counted on to effect pollination, in all such countries of genial sunshine as California.

Again, it is just as positive that bees never attack or pierce sound fruit. If over-ripe fruit bursts, or if wasp or bird break the skin, than the bees are quick to sip the oozing juice. Thus the honey-bee is not the first aggressor, but the waiting sentinel to discover the leak and prevent waste.

There should be no quarrel between fruit and bee men. Each is a genuine and substantial aid to the other. The apiarist needs the nectar-secreting bloom of the orchard, and the pomologist must have the pollinating bees to secure the largest fruitage.

Fortunately, the diseases of bees are not very numerous or very serious. In California there are only three, and probably none of these need be at all disastrous to the well-informed bee-keeper.

A NEW BEE-DISEASE.—The present season a new malady was discovered in our apiaries in Southern California and several other States. The brood died in the cells in all stages of growth. The black or discolored larvæ of all sizes and the dead pupæ were found scattered, often thickly, throughout the maturing brood. I secured several colonies, all showing the disease to a greater or less degree, and fed them honey or syrup, variously medicated, and also that which was not medicated. All recovered wholly in a few weeks. Other colonies in the same apiary, where I

procured mine, did not recover. Upon close examination I found two colonies among the 20 in the apiary, which had abandoned honey, and neither showed any sign of the disease. Thus I have wondered if this disease were not owing to a sort of partial starvation. If bees have not sufficient stores to properly feed and breed, we can readily see that many immature bees might fail to develop. I am inclined to believe that our recent trouble came wholly from this condition. We have never heard of any such disease in Sunny Italy, or previously in our own country. We have rarely had such an utter honey-dearth in Southern California. In many apiaries, those well-cared-for, when stores are abundant, there has been no show of the disease. All of these facts, together with my own observations and experiments, lead me to conclude that scant stores, too meager nourishment, and, consequently, imperfect nutrition, caused the mortality so much commented upon the past few weeks. The obvious suggestions are, more care and attention, more honey left in the hives at the close of the season, and careful attention, and, if necessary, feeding in such years of honey-dearth as the present has been.

BEE-PARALYSIS.—This is also called the "nameless bee-disease," and has attracted much attention the last few years, not only in California, but in several States. In this disease the imago, or immature bees, are the ones that die. The dead or enfeebled bees are carried by other bees outside, and thus the ground in front of the hives has constantly a mound of dead bees. Usually the colony does not wholly succumb, but it is so weakened that it produced little or no honey. Generally the colony recovers after a time, usually after the bees have replaced the queen with a young one. This disease has worked considerable havoc in some parts of this State the present season; I think in some cases the loss has been as much from the "new bee-disease," already described, as from the "bee-paralysis."

I am much inclined to the opinion that partial starvation may cause weak mature bees as well as enfeebled larvæ, and so it is quite possible that, in some cases, the "nameless bee-disease" may have been credited with harm due to insufficient stores. From my own observation, and from what I can learn from others, I think this last disease comes from some constitutional weakness of the queen, which shows itself in debility of her progeny, the worker-bees. I have known, in several cases, the disease to soon disappear after the queen was superseded; and in other cases, where the bees replaced their queen with a young, healthy one, the disease soon vanished. It is quite possible that those who claim to have cured the evil by some treatment, as giving the bees salt, or salt water, gave their treatment just after the bees had superseded their queen. Others who were unsuccessful with the same remedies, were less fortunate in the date of application. The best advice which can be given, in case the old bees die off too rapidly, is to see that the bees have abundance of food, and in case that fails to bring relief, try re-queening of all affected colonies.

(Concluded next week.)

VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

"SMELLY" CISTERN.—I have to thank more than one of the friends for suggesting that a "smelly" cistern may be cured by putting in a bucket pump. It seems that when the water is allowed to stand still for a long time it sort o' decays, and the bucket pump stirs it up. I wonder how much stirring up some lazy people would need, to keep them from having dry rot.

THAT KINKY MAN.—Here's a square, out-and-out *unkinked* apology to that kinky man Thompson. He's given us on page 465 a good quantity of kinks, and they're of good quality, too.

PERSONAL EXPERIENCES.—On page 471 are "Some Personal Experiences" that I read while traveling on the cars. I laughed aloud at some passages, and I suppose the other passengers wondered what ailed me. Then an exquisite tenderness at the close brought a sigh that would not be repressed. All in all, if the writer had been at hand I would have given him a very hearty grasp. But say, Mr. Editor, who is Edwin Bevins,* anyhow? Is he a farmer, shoemaker, lawyer, or what?

In reply to your appeal, Friend Bevins, I assure you there are pleasures in bee-keeping that can never be rated on a cash basis. I keep bees for the money that's in the business, but I hardly know what other business I would stick to so persistently with the same discouraging results I have experienced this year with an outlay of 1,500 pounds of sugar and an income of 20 pounds of honey!

I have some doubt whether a bee-keeper could be considered a thoroughbred if he didn't begin first thing to try to make improvements. But as he gets settled more soberly, he'll begin to think that among the hundreds that have preceded him, some one else may have thought of the very improvements that have suggested themselves to him, and in time he'll get to be more slow in making changes. I haven't a word to say against your making your own hives, but you'll take it good-naturedly—won't you, Bro. Bevins?—if I say a word about your changes.

I don't like the cleats projecting below the cover at each end, but I think you will like the cleats nailed on the end of the cover rather than under or over it. You think you will like better to have your hive so deep that there will be a space below the frames no matter upon what flat surface it is placed. Possibly you may, but I doubt it. I have had such hives for a third of a century—have more than 100 in use now. For several years I have had some that require the ⅜-inch strip on the bottom-board. So you see I ought to know pretty well which kind suits me, although I'm not going to insist that you must be governed by my taste. The past summer I sawed off ⅜ of an inch from some of the old ones, and I shall be glad when they are all replaced. When you go to pile hives one upon another, whether bees are in them or not, it's so nice to have them pile up bee-tight, mouse-tight and moth-tight. With your improvement it is no little trouble to get the entrances securely closed, and the older the hives the greater the difficulty. With the others there's nothing to be done but to pile them up. When you want to allow your bees more than one story to work in (and you'll want to do that some time, even if you don't now), your arrangement won't allow it without having more than double the space you want between the top bars in one story and the bottom-bars in the next story. But having said thus much, I'll be magnanimous and allow you make your hives just as you please.

I sincerely hope that you'll carefully compare the results of the big and little hives side by side in the same apiary, worked for the same kind of honey, and help settle this war that's on. It is one of the things I very much want to know about.

You say that I now condemn feeding sugar syrup to be stored in sections, and intimate that at other times I have upheld it. Now look here, Frend Bevins, I've been misjudged no little in that direction, and have generally kept quiet about it, but I can't stand it to keep quiet and have *you* think that way. A man with as much brains as I think you have, ought to be able to see the truth without prejudice, and a man with as good a heart as I think you have, I can't bear to have think ill of me.

Now suppose you put your finger on the spot where I ever said a single word in

favor of the practice in question. I am safe in saying that you can find no single word in that direction, for I never favored it, and I am not in the habit of thinking one way and speaking another. You hint about its being expedient "to avoid saying anything about it." Does that condemn? Weren't there thousands of good men who were entirely silent about it? Do you condemn them? Were you not silent about it yourself?

But if you'll take the trouble to look, I think you will have no trouble in seeing that I committed myself on the side you think right. I have an impression that no man did any more than I did to stop the discussion that we thought was doing harm, what I said being all the more effective just because it was not said publicly.

I think I hear you say, "Yes, all you say may be true, but then you cannot deny that you defended the man who started the discussion." Let us look at the nature of that defense. Prof. Cook said he thought bees could make genuine honey out of cane-sugar. No matter how much he may have been mistaken in his view, he was honest in his belief. Prof. Cook is no deep-dyed villain. If there's an honest man in our ranks, he's one. But we thought he was wrong in his views, and we called out, "Shut up." He shut up. Then the cry was raised, "He must apologize." And for what? For uttering what he believed to be a truth—a truth that he thought would be of benefit to bee-keepers? Just look that thing square in the face, Friend Bevins, and see if you think it looks reasonable. Is there anything about it that looks kind or just? Against that wicked demand I raised my voice in protest, and if I have any regret in the case, it is that that protest was not more vigorously expressed.

Now there are two things that are entirely separate, that I think you and some others have been inclined to mix. One is that Prof. Cook is mistaken in his belief, and that it is not wise to discuss that belief. That's a thing by itself on which you and I are agreed, and I think you will give me credit for calling a spade a spade.

The other is an entirely separate thing, and I will try to call "a spade a spade" as I attempt to characterize it. It was the frantic effort to make him apologize† for speaking what he believed to be a good and useful truth—an effort that I denounce as unjust, uncharitable, unchristian. Those who participated in it, and who know Prof. Cook for what he is, when they come to give the matter a sober second thought will have no feeling of self-gratulation at having wounded a heart so loving and true, and as the shadows of life's evening gather about them, and the softened feelings of their better natures assert themselves, their only regret will be that they did not themselves apologize to Prof. Cook.

Marengo, Ill.

[*We'll have to call on Bro. Bevins to "stand up" and identify himself. Sorry to say that all we know of him, Doctor, is that he's one of our regular subscribers, and a splendid writer. Further than that, "this deponent saith not."

†We think Dr. Miller is greatly mistaken in saying that anybody wanted Prof. Cook to "apologize" for anything he conscientiously *believed* in regard to the sugar-honey matter. *We* certainly didn't. What we did want, was that those who were the main originators und defenders of the sugar-honey idea should at least express a regret if the result of their suggestions should finally be detrimental to the interests of honest honey-production. That could have been done in one sentence. But no; they chose to say nothing at all if they couldn't press their favorite (but to us, and to most others, *much mistaken*) claims for sugar-honey. The whole thing was most unfortunate. But that matter is not going to be "aired" again in the "American Bee Journal" right away. Bro. Bevins may reply to Dr. Miller's question, if he thinks it worth while, but that must end it in this bee-paper.—Ed.]

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Report for 1894.

I had 13 colonies, spring count, with no swarms during the season. I increased by the nucleus plan, after Aug. 5, to 24. I bought 2 prime swarms on June 25 at $2.50 each, and furnished the hives. One gave about 90 pounds of surplus, and the other not one pound. There is no basswood in this locality, so I moved my bees about 6 miles on July 3, then on August 5 I moved them 15 miles for buckwheat, which lasted 36 days. Bees are all at home now and in good condition for winter. My crop is as follows, all extracted honey: From clover, 15 pounds; basswood 82 pounds; buckwheat, 1283 pounds. I have sold about 800 pounds of the buckwheat honey at 10 cents per pound.

GEORGE A. FORGERSON.

Rosemount, Minn., Oct. 22.

One of the Asters.

I enclose sample bloom of a kind of plant we have in this part of the world that we call "wild aster." It comes into bloom about Sept. 10, and continues in bloom until freezing weather, and furnishes more honey and pollen than any other plant we have. If it had not been for it, I don't believe that one colony of bees in 50 would have had stores enough for winter, unless they had been fed. Sept. 1 the bees were about out of honey, but now every frame is full of honey, and some colonies are working in the supers. I never saw bees work stronger on clover than they have on the asters since Sept. 15.

This plant came to this country in the last few years. At first there were only a few plants here and there, but now it has about taken all the waste land in the country. It seems to take on old meadows and clover fields best, and during the hot, dry weather the past summer, when all other plants were dried up, the asters were green and fresh as in springtime.

If any bee-keepers want seed of the asters, if they will send me six cents in stamps, to pay postage and putting up, I will take pleasure in sending a small package. I am confident that if the plant does as well in other climates as it does in this, it would save bee-keepers hundreds of dollars, and solve the winter stores problem.

This has been a very dry season here, and very little surplus honey.

The "old reliable" "American Bee Journal" is a welcome weekly visitor—always on time, and something good in every number. W. S. FEEBACK.

Carlisle, Ky., Oct. 13.

[The plant is an aster, but the specimen sent was not complete enough to tell what species.—EDITOR.]

Varieties of Golden-Rod, Etc.

I notice on page 538 G. W. N. describes the varieties of golden-rod from which bees get *most* honey in this locality, viz.: *Solidago lanceolata*—narrow leaved golden-rod—the edges of the leaves not toothed, notched or divided, the flowers in flat-topped heads in little clusters crowded. Grows 2 to 3 feet high in moist soil. This variety yields nectar during the latter part of August and forepart of September, and when abundant in the hives, gives off a very disagreeable odor, while the bees are evaporating it, so that a novice sometimes imagines that a bad case of foul brood has developed in his apiary.

Gray's "Manual of Botany of the Northern United States," revised and extended to the 100th meridian, gives 42 varieties of golden-rod, 20 of which are found in our (Conn.) State. We have had a fine honey-flow here from this plant and the asters. Bees work but little on either of these plants on dry ground, but in moist and wet localities they can be found from the time they commence to bloom until killed by frost.

JOHN K. GOODRICH.

Waterbury, Conn., Oct. 26.

Called "American Colombo."

Being a subscriber, and something of a bee-man myself, I deem it my duty to do whatever lies in my power to assist the fraternity. Having occasion to make repeated trips into the mountains the

past summer, I noticed a plant upon which the bees fairly swarm, to the neglect of everything else in the vicinity of it. I send a specimen in the shape of the seed-pods and seeds.

The leaves of this plant resemble somewhat the tobacco plant, or more nearly what in the New England States we used to term "skunk cabbage." From the clump of leaves a stalk is sent up to a height from six to twelve feet, and with flowers surrounding the stalk from the bottom to the top, as is shown by the small piece of the top of the stalk inclosed in the package. Passing by one of these plants, from the humming one would suppose that a whole colony of bees was busily at work on a single stalk.

This plant grows in ravines where it is damp during a good portion of the year, and I think that an acre of the plants would keep a whole apiary busy during the flowering season. Whether it would yield a good-flavored honey, or whether it would be healthful, I cannot say. Perhaps you can classify it, and give me some information about it.

WM. N. KELLY.

Prescott, Ariz., Oct. 7.

[The plant is *Frasera speciosa*, or American colombo. The reason the bees like it so well is that on the middle of each petal, on the inside, is a pair of hairy glandular bodies.—T. J. BURRILL.]

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

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Read our great offer on page 578.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Colo.

CALIFORNIA.—The next regular meeting of the Central California Bee-Keepers' Association will be held on the first Wednesday in December, at Hanford, Calif. You are cordially invited to attend.
Lemoore, Calif. J. F. FLORY, Sec.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

ILLINOIS.—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend. B. KENNEDY, Sec.
New Milford, Ill.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1½ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.
Indianapolis, Ind.

ILLINOIS.—The Illinois State Bee-Keepers Association will meet at the State House in Springfield, on Tuesday and Wednesday, Nov. 13th and 14th, 1894. On account of the meeting of the National and State Granges at the same time and place, railroad rates of 1½ fares for the round trip are sure, if each person attending will not fail to get a certificate when he buys his ticket. The time has come when bee-keepers of the State, if they take proper steps, may obtain recognition in the experiment station. So let us have a full representation from all parts of the State, as well as from other States.
Bradfordton, Ill. JAS. A. STONE, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will meet in the Opera House in Montford, Wis., Nov. 14 and 15, 1894. There will be a free-for-all "Question-Box and Answers," also a grand display of races of bees, implements and supplies. If you have anything of interest to bee-culture, please bring or send it. Montford has offered plenty of music, and SPECIAL REDUCED BOARD. The following is only a part of the program: President's Address, N. E. France. Queen-Rearing, J. W. VanAllen. Swarming—Natur-

al or Artificial. Delos Ricks. Pasturage, Jas Fisher, Jr. Marketing Honey, M. M. Rice How to Winter Bees. Austin Dexter. Location of Apiary, E. Pike. Removing Queens During the Honey-Flow. A. A. Arms. Best Hive, F. F. Zellmer. Experiments, Geo. Lee. Comb Foundation, N. E. France. If you are interested in bees you cannot afford to miss this meeting. Come and bring your lady with you.
Hurlbut, Wis. A. A. ARMS, Sec.

N. E. OHIO AND N. W. PA.—The Northeastern Ohio and Northwestern Pennsylvania Bee-Keepers' Association will hold its next regular annual meeting in the parlors of Hotel St. Nicholas, at Corry, Pa., on Nov. 21 and 22, 1894. A good program has been arranged. Bring your questions for the question-box. The hotel is opposite Union depot; rates have been reduced to $1.50 per day to those attending the convention. Programs can be had by addressing the Secretary. Everybody, especially ladies, is invited to attend.
Mosiertown, Pa. GEO. SPITLER, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers Association will meet at the Court House in Charlotte, N. C., on Dec. 6, 1894, at 11 o'clock a.m. A full attendance is desired.
Steel Creek, N. C. A. L. BEACH, Sec.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & Co., 128 Franklin St

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 423 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Honey & Beeswax Market Quotations

CHICAGO, ILL., Sept. 17.—The honey market is quite active. We are getting good prices considering the hard times, owing to the reported scarcity of crop. We quote: Fancy white, 15c.; No. 1, 14c. Extracted, 6@7c. Beeswax, 25@26c. J. A. L.

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 6@7c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27@28c.
R. A. B & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

KANSAS CITY, Mo., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Sept. 20.—The demand for comb honey is increasing, in a jobbing way, in spite of the continued warm weather. Both comb and extracted honey is arriving freely. We quote: Fancy clover, 1-lbs., 13@15c.; white clover, 12@13c.; fair, 10@12c.; buckwheat, 10@11c. Extracted, clover or basswood, 6@6½c; buckwheat, 5@5½c; Southern, 45@60c. per gallon, according to quality. Beeswax, 25@27c, C. I. & B.

CINCINNATI, O., Oct. 19.—There is a very good demand for choice white comb honey at 14@15c. Demand is fair for extracted at 4@7c., according to quality. Comb honey brings best prices now, when it is something new yet and comparatively scarce, and not at Christmas-time, when markets are generally overstocked.
Beeswax is in good demand at 22@27c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, Mo., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. CO.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat, 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6½c.; buckwheat, 5½@6c. Beeswax, 27@

29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

☞ We are pleased to again call our readers' attention to the advertisement of the Famous Manufacturing Company, of Chicago, who, if all do not, should know by this time, manufacture the "Champion" Incubators and Brooders. They have for this season a machine that cannot fail to give satisfaction, as it embodies all of the best principles that their years of experience have proven to be correct, as well as new improvements that they have found valuable in artificial incubation. Their elegant catalogue, full of practical information, will be sent free on application, if you enclose a two-cent stamp to help pay postage.

Profitable Bee-Keeping, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See page 571 of this number of the BEE JOURNAL for description and prices.

☞ "As for me, I could not very well live without the weekly visit of the "Old Reliable."—H. Dupret, of Canada, Nov. 1, 1894.

Good Honey-Sellers ought to be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will *create a demand* for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, $1.25; or 100 copies $2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

Advertisements.

HONEY PAILS On present stock all orders are subject to prior sale, all pails tested. 10-lb pails, per 100, $6.00; 5-lb. pails, per 100, $4; 2½-lb. pails, per 100, $3.50 at our warehouse. Terms net cash.
19A2t **HORN & CO., Keokuk, Iowa.**
Mention the American Bee Journal

For Sale —An Apiary of 76 Colonies of Bees in No. 1 hives, located in a splendid place for bee-keeping and also poultry-raising.
☞ Write for particulars.
W. L. Backensto, Fort Logan, Colo.
Mention the American Bee Journal.

For Sale — 150 strong Colonies of **Italian Bees** in painted hives—$4 50 per colony. In lots of 10—$3.00 each; 20 and over, $2.50 each. Must sell on account of sickness. **Speak Quick!**
G. E. SEELMAN,
Westbury Station, Queens Co., N. Y.
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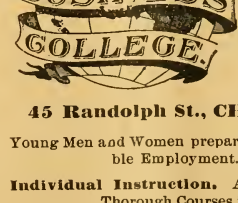

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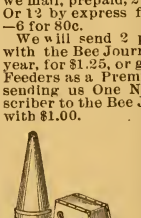

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VOL. XXXIV. CHICAGO, ILL., NOV. 15, 1894. NO. 20.

EDITORIAL

GEORGE W YORK, EDITOR.

Saying Nothing is sometimes the kindest thing you can say of some people.

Somnambulist, in the "Progressive Bee-Keeper" for November, gives a very good condensed report of the St. Joseph convention. Sommy knows a good thing when she (or he) sees it; and also knows how to tell about it.

Mrs. Chas. White, of Aurora, Nebr., died from heart disease Oct. 18. This sad announcement was given in the "Nebraska Bee-Keeper" for October. Our sincerest sympathies are with Bro. White and his family in their severe affliction.

The Kansas Farmer, published at Topeka, Kans., contained in its issue for Oct. 24, the most interesting condensed reports of the St. Joseph convention that we have seen in any of our agricultural exchanges. The "Kansas Farmer" is one of the brightest and best farm papers published in the West. Its representative at the convention, Mr. H. J. Newberry, is a wide-awake gentleman, with Western ideas of push and pluck well developed. He "gets there," consequently.

Editor Holtermann, in the "Canadian Bee Journal" for November, quite enthusiastically congratulates Canadian bee-keepers upon his success in taking the next North American convention to Toronto, Ont. He did make a most earnest plea for it, at St. Joseph, and so he is probably excusable for feeling somewhat elated over what he terms their "Victory."

One thing is certain—if all is well, the Toronto meeting in 1895 will be a grand one. Those "Canucky cousins" of ours do have a way of turning out to conventions that almost equals the "swarming" of the bee-folks in "the Fatherland." So we are looking forward for the biggest and best meeting, next year, that the North American has ever held. And we don't expect to be disappointed, either.

Editor Leahy's Wife has been quite sick for two months, we regret to learn. Her illness has caused Bro. Leahy to lose so much sleep that he hasn't yet felt equal to the task of wrtting up an account of his trip to St. Joseph for his paper—the "Progressive Bee-Keeper." We hope Mrs. L.'s recovery may be speedy and complete, so that her good husband may tell his readers all about his St. Joseph experiences.

Willie Atchley—one of Mrs. Atchley's sons—will go through the whole program of queen-rearing — (dipping cells, grafting, moving cells, etc.)—at the Mid-winter Bee-Meeting to be held in Beeville, Tex., on Dec. 27 and 28. This feature alone would justify an extra effort to attend. As Willie is called "the greatest queen-rearer in the world," "how he does it" would be worth seeing.

The Convention Report is entirely omitted in this number, for the simple reason that no "copy" came in time to put into it. We waited as long as we dared, and then finally had to put in other matter. We regret the delay very much indeed, as we had hoped to crowd through the whole Report as rapidly as we possibly could, but through some hook or crook we are prevented in carrying out our plans. It is no fault of ours, however, for we have stood ready to do our part; but if the matter is not sent to us in time, we can't very well publish it promptly. Doubtless there is a good reason for the delay outside of this office, and we will be glad to announce it as soon as we learn it.

To Keep Ants Away.—In a recent issue of the "Old Homestead," we read this about keeping ants away, and as it may help some bee-keeper who is troubled by ants, we give it a place here:

Rub a light film-coat of balsam Peru around near the bottom of table or kitchen safe legs—just a narrow band will do—and renew the balsam every two or three weeks. This will keep ants away from tables, kitchen safes, etc., and what they hold or contain, provided there is no other ant-way than up the legs. One drop of balsam Peru spread around the upper part of a syrup bottle will keep the ants away for months. Boil one ounce of balsam Peru in one gallon of rain-water for half an hour, and sponge this water, while hot, over wooden floors and walls, and it will keep ants away for a long time.

A Mutual Admiration Society—whatever that may mean, and wherever it may be located—received quite a little attention at the hands of Bro. Hutchinson in the October "Review." After saying several good things in regard to speaking and writing kind words about each other, Bro. H. says this:

That editors and correspondents have been praising one another simply that they may receive the same in return, I don't believe. All the kind things that I have said of others have come from my heart—they have been honest, and have been uttered with no hope or thought that I should receive praise in return unless I deserved it.

Bro. Hutchinson has expressed our own sentiments exactly in the above paragraph. Whatever *we* have said in these columns in praise of our friends surely were the sincere expressions of our best nature, and without the slightest expectation of "praise in return." We feel certain that all who are acquainted with us, well know that we don't hesitate to "call a spade a spade," when it is necessary, and also that we are just as free to bestow praise when and where we feel that it is deserved.

After all, that so-called "mutual admiration society" is pretty much of a myth. *We* have already devoted too much space in the "American Bee Journal" to a discussion of this particular specimen of mythology, and trust our readers will excuse this one more reference to it.

Mrs. S. M. Brooks and her husband keep bees about 5 miles west of the Court House building in the city of Chicago. Their apiary consists of 30 colonies at present, and their crop this year will amount to about 2,000 pounds, nearly all in the comb. For their comb honey they get 18 cents cash per pound at the grocery store near them, or 20 cents a section when called for at their door. All their honey is sold in the home market, hence the good price secured. Sweet clover is the principal source from which their surplus is obtained, an abundance of it being found around Chicago. They have had as high as nearly 3,000 pounds of honey in a season.

All of which is pretty good for a city apiary.

Bro. Thomas G. Newman, we are glad to learn, has about recovered from the severe assaults of his old enemy—"la grippe." In the November "Illustrated Home Journal," he says this, in referring to Bro. E. R. Root's recent attack from the same heartless "gripper:"

Having had it for six years, we know how to sympathize with our brother. We hope it will not take so long for him to conquer it as it did in our case. We are thankful to state that we are now about through with it.

Take a Sleigh-Ride as soon as the snow falls in sufficient quantity. See the buggy-sleigh offered on page 638 in connection with a year's subscription to the "American Bee Journal." We don't know of a cheaper sleigh, and equally good. It is also a no-tip-over affair. The "beautiful snow" will soon be here—better get ready to "take a good slide!"

Some Stolen Straws.—We find the following among Dr. Miller's "Stray Straws" in "Gleanings" for Oct. 15th:

"Honey-plant" is a common term in this country, and "bee-flower" stands for the same thing in England.

To shake bees off a heavy comb, hold the frame with both hands; if the comb is light, better hold it with the left hand, and pound with the right fist on the left.

In shipping bees, C. Dadant says, in "Revue," he would give no water, no pollen, no brood, only *sealed* honey. All this to avoid having the bees' intestines distended.

A writer in "Schweizerische Bienenzeitung" says bees don't propolize their hives for warmth, but as protection against the bee-moth, closing the cracks where eggs might be laid.

To avoid cracks in cakes of wax, don't let the outside cool rapidly. Cover a cloth and board over the dish while cooling, or let it stand in a stove oven while the fire dies out over night.

Gerstung says extracting during fruit-bloom is good, as returning the extracted combs to be cleaned up excites brood-rearing, but the same thing is not advisable in the main harvest, as it excites swarming.

Remember, when the robbers are troublesome, do anything, *any*thing, rather than take out of their way the thing they are robbing, without leaving something in its place. Outside appearances must remain unchanged.

Eggs, 2,000 daily, is only an average for a good queen. Before the development of her ovaries she weighs .2 gram; 2,000 eggs weigh .42 gram, so she lays more than twice her own weight of eggs daily. But the workers digest her food for her.

A balled queen, we are told to release by blowing smoke on the ball. But there's a right and a wrong way. Hold the nozzle of the smoker close to the ball, and blow hot smoke on them, and you might as well step on the ball. Hold your smoker at a distance, and blow cold smoke on the bees, and all will be lovely.

"Fegling" is the German name for a kind of artificial swarm originating with Gravenhorst, and indorsed by Gerstung as coming nearest to a natural swarm. From a strong colony, take one frame of brood, with adhering bees and queen; put in empty hive on a new stand; fill out with partly built combs; brush into it all the bees, and trust old bees to return to the old stand and rear a queen. Hardly looks right, does it? But remember Gravenhorst is no spring chicken.

Handsome Sections have been received at this office as samples, made by Mr. O. H. Townsend, of Alamo, Mich. They are nice enough for any one.

Bees and Honey in England.—We find the following from a "Country Gentleman" correspondent in Sussex, England, dated Sept. 15th:

We poor bee-folks have had a disappointing summer; the season opened early, and swarms came freely, even under all the anti-swarming aids of the day. Honey was rapidly stored, and sale in sections promised well; but wet, or rather "broken," weather followed, and the busy workers got disappointed, as they could do no more than hold their own, gathering on one fine day what was needed for sustenance in the three or four stormy or wet days that followed. So the clover and summer-flowers' season went, and the heather followed, but with no better encouragement, for it is now fast going off bloom on the moors, and little good is done. There will be a moderate supply of "run honey," but of sections next to none. This enhances the value in the neighboring fashionable towns, Brighton, Eastbourne, and Tunbridge Wells, where there is a ready market; but the increased price will not by any means atone for a deficient yield.

I notice with satisfaction one new profession which apiculture has introduced. Each district has its perambulating "professional," who, for a very modest charge, oversees the colonies, "drives" the swarms, removes the honey, and advises as to all future management.

Mr. T. B. Terry—Ohio's famous farmer—attended the first evening session of the St. Joseph convention, and delivered a most helpful and entertaining talk on the great value of growing clover on farm lands as a renovator and fertilizer of the soil. The attractive feature of Mr. Terry's talk was the fact that he spoke from personal experience. He had thoroughly tried and clearly proven on his own farm what he presented to his hearers. He was employed to speak at some 40 farmers' institutes in Missouri this fall, and no doubt if his instructions are well followed out, farming in that State will be made very profitable in a few years. We very much enjoyed meeting Mr. Terry, and listening to what he had to say.

Foul Brood.—The editor of the "Australian Bee-Bulletin," in the September number, gives this account of a little experience with foul brood:

We have had a little foul brood experience that may be interesting. We visited our out-apiary on July 31, and discovered foul brood bad in No. 2 hive. The day had been fine, but as we were looking at this

hive, a cold wind came up from the sea, accompanied with drizzling rain. The foul brood was in two frames, and it was a pitiable sight to see. We hastily cut out all the affected brood and threw it in the fire; procured the sprayer, filled it with carbolic acid (1 part in 17), and poured it well into the combs and about the hive. The bees were soon all outside. We covered the bees and hive with bagging, and they were back in the hive the next day. On Sept. 14 it was one of the most prosperous colonies in the yard—not a trace of foul brood in it. A good sprayer is a necessity in every apiary. That alone will reach the bottom of the cells, where the home of the disease is.

Mr. J. C. Wallenmeyer, of Evansville, Ind., we are pleased to learn, secured the 1st premium on the best display of honey, and diploma for best display of apiarian implements, at the big Fair held in Evansville, Ind., this fall; also 1st premium on best comb honey, 1st on best extracted, and 1st on best display of honey. He also took the 1st premium for the best imported Italian queen at the New Harmony, Ind., Fair. Bees in Mr. W.'s locality were still gathering nectar from white aster on Oct. 17. Their first killing frost set in on Oct. 14.

The Nebraska Bee-Keeper for October was nearly wholly devoted to quite a full report of the Nebraska State Bee-Keepers' convention, held at Lincoln, in September. Editor Stilson said that on account of too much State and County Fair business, and three bee-conventions which he had attended the past few weeks, the October number of his paper was very late. He surely had a good excuse, and no doubt his readers will overlook the delay this time, and—give him another chance!

Biggle Berry Book.—This number 2 of the Biggle Farm Library, is published by Wilmer Atkinson Co., Philadelphia, Pa. It is edited by Judge Jacob Biggle, a practical berry-grower and berry-lover, who has arranged in a systematic and attractive way not only what he has to say himself, but also the valuable advice and experience of many leading berry experts of the country who have contributed to its pages. It contains 144 pages, neatly bound in cloth, price, 50 cents.

☞ "Long live the 'American Bee Journal.'"—M. D. Andes, of Tennessee, Oct. 29, 1894.

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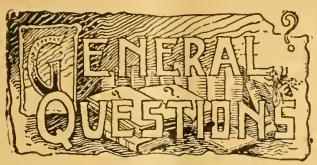


ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Does the Queen Will It?

If the queen wills the sex of her eggs, why does she will to lay a male egg, for we know she needs no male herself; neither is she inclined to accommodate other queens? F. C. M.

ANSWER.—Now you've got to the spot where I don't know. I don't know whether the queen wills the sex of the egg, and if she does I don't know why, and I don't know whether she knows why. "We know she needs no male herself," but I don't know that she knows that. While she may be on friendly terms with other queens, I don't know but what she is "inclined to accommodate other queens," provided they are her own daughters. In fact this is one of the many subjects about which I don't know.

Why Did the Queens Die?

What caused the death of my queens? I clipped the wings of all of them. On July 21 one colony cast a swarm, and on July 23 another colony cast a swarm. The queens died in half a minute after they came out of the hive. I was present the first time the bees came out to swarm, and I saw the queen coming out swiftly, and turning round on the ground a moment, instantly died. Both queens acted the same, and died. First I thought she had jumped down from the frame and struck her head against the hive-bottom, and split her skull. But since then I have thought it came from the sun, as it was 103°, and the ground was warm, and no fresh air. She had no wings to vibrate so she could get some fresh air. What do you think of it? A. P. C.

ANSWER.—I don't know what to think. I don't think the queen's wing being clipped would make an appreciable difference as to keeping cool. I never saw one ventilating. The queen's wing being clipped, the swarm might be delayed till a young queen emerged, and the young queen might sting the old one, but in that case she would hardly come out of the hive in such a lively manner. I give it up. If any one knows, let him tell.

Plan of Uniting Colonies.

In uniting bees, how would it do to take the queen away from one colony, put a screen on top of the hive the queen is in, then in the evening, when the bees are all in, take the queenless colony and set it on top of the hive with the screen on it, with the bottom-board off the upper story? After they have been there say 24 hours, open a small hole in the screen from ¼ to 5/16 inch in diameter, then in 24 hours more draw out the screen and let them have the run of both hives. A. P. R.

ANSWER.—I think the plan will work satisfactorily, as it is much like what has been advised in the "American Bee Journal."

Fears Queenlessness.

I have one colony of bees that has rejected their new queen. I have given them a frame of brood and eggs every 8 or 9 days. I sent to Arkansas for a queen for them, but the breeder cannot send it this fall, owing to sickness. How would it do to let the colony go as it is till spring? I suppose they will have a queen, but she won't be mated, as the drones are all gone. Please tell me how to manage such a colony. W. W. P.
Choctaw City, Okla. T.

ANSWER.—It's hard to say what you ought to do without knowing whether your colony has a queen or not. It's quite possible that you may find next spring that they have a good queen.

Although drones are all gone, she may have mated earlier and not commenced laying very promptly, or there may have been drones that you didn't see. If there's a fairly strong colony, I think I would let them alone to winter over.

Refuses to Take Winter Stores.

Once a week the "American Bee Journal" comes to our house. I suppose we could get along without it. So a man *might* worry through a Wisconsin winter without mittens, but he would lose more time slapping his hands to warm them, than the cost of mittens would amount to. So with the "Bee Journal"—one gets five times its cost in little "kinks."

I have one colony that for the past two months I have tried to get to store their winter supply, but nary a store. It is a good, strong colony, with one of Hutchinson's queens, and has had plenty of brood at all times. I have fed honey, both comb and extracted, granulated sugar syrup, both thick and thin, but they will not store more than four or five pounds. I would trot them in with another colony, only for their queen being an Italian.

The honey was a very light crop this year. I got 95 pounds from 13 colonies. My neighbor, with 45 colonies, took but 150 pounds of honey. Honey sells at 12½ cents for cash, or 15 cents in store trade.

I have taken the hives from their summer stands, and set them in a small building until time for cellaring; the bees are out on warm days, still gathering pollen. E. G.

Cylon, Wis., Nov. 3.

ANSWER.—When a colony refuses to take winter stores when others do so freely, the first question that arises is whether they haven't had enough already. Still, there's a difference in my colonies about taking feed, and I can't tell why. If you had told *how* you gave the feed it would have been well.

When you gave comb honey, if you gave it in frames anywhere near their brood-nest, they may have felt satisfied with it there without disturbing it till they wanted it. But wherever it was, if you uncapped it, or daubed it over with honey in case it was not sealed, you might count pretty safely on their cleaning it up, and putting it in reach of the brood-nest if needed there. I had a colony to which I gave some combs to empty, setting the combs under the colony, but they said it was all right there and let it alone. Then I set an empty hive over the hive containing the combs, and set the colony over the empty hive. The combs in the lower hive were then promptly emptied.

Sugar syrup will be taken down hot when it would be neglected cold.

One thing you could have done. When you found they would not take the feed, you could have given them filled combs from another colony, then fed up this latter—providing you had such a colony.

If you got them to take four or five pounds of syrup, and they had the chance to take more during two months, I shouldn't feel very uneasy but what they had enough to take them through till spring, then give them more. Remember the spring is the time when they consume stores more rapidly than in winter.

Seems to me I'd rather let the bees stay on their summer stands till put into the cellar.

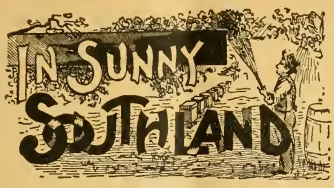
Borage as a Honey-Plant.

Why don't some one say something about borage as a bee-plant? I have not seen a word regarding it in all that has been written on bee-pasturage. It began to blossom here with the basswood and continued until the drouth withered it, and as soon as the fall rains came it began again and lasted until we had a frost that froze ice as thick as window-glass. I do not know what the bees get from it, but it must be useful to them or they would not be fooling their time away on it when basswood is in bloom. J. H. D.

Belleville, Wis.

ANS.—Borage is a well-known honey-plant, formerly more spoken of than now. I suppose less is spoken of it than would otherwise be if it were found in larger quantities, or if it were valuable for some other purpose than bee-pasture.

Read our great offer on page 610.



CONDUCTED BY
MRS. JENNIE ATCHLEY.
BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 13.

(Continued from page 527.)

RECEPTACLES FOR HONEY—HOW TO PUT IT UP.

As we have now learned to produce honey, I will tell you how to put it up, and how to keep it. The best vessels for extracted honey are the 5-gallon square cans with screw caps, and two to a case. This is getting to be a standard package for extracted honey. But in the South, where cypress barrels are so cheap, and freight high on the cans from factories, 24-gallon kegs are extensively used, so the next best thing for extracted honey, to the tin cans, is the kegs. But we had better use none but the iron-bound, as the wood-bound kegs are likely to burst in shipping.

Right here I will give you a pointer that will save you some trouble and time: If you live near enough to a barrel factory, go and attend to your own barrels while being built, and have good ones put up, telling the cooper what you want them for, and after one head is put in, have your beeswax ready (or beeswax and paraffine will do, mixed half and half, but I don't like all paraffine, it doesn't stick tight enough), and pour in the melted wax, twirling the barrels in a way that they will be thinly coated with wax all over, and also give last head a coating before putting it in, and you will have a honey-barrel that will not leak if properly built, and honey will not soak up into the wood, nor will the wood injure the taste of the honey. And if your honey is ripe, as it should be, it will keep any length of time. I have heard mother say, the older the honey the better. She has kept it for 20 years, and it was still as good as at first.

The public, by some reason or other, especially the consumers of honey, have come to believe it won't do to buy honey in large quantities, thinking it will sour and spoil. But it is a mistake, for good, ripe honey kept in a good vessel will keep for a life-time and be good. It will no doubt solidify, but it can be brought back to its liquid state by melting it in boiling water, by placing the vessel containing the honey in another with the water, and let it remain until all is melted; and the honey will be as clear and as good as the day it was put up.

I would keep the barrels in the cellar or some cool place, but a warm place will not hurt it, only the barrels may shrink, and eventually leak if kept where it is too warm. But a warm room will not affect the honey.

Now, the foregoing directions are for keeping honey for home use, and for you to tell your customers how to keep their honey when they buy a barrel or keg from you at a time. Of course I do not expect you to keep your honey any longer than you can find sale for it, and sometimes we may have our honey engaged before we extract it. You may say that people ought to know how to keep honey, but I tell you the public need schooling, and they look to you to tell them how, etc. Some bee-keepers fail to build up a honey (home) market just by not schooling people about honey, and being ready and free to advise.

Comb honey is somewhat more troublesome to keep than extracted, and ought to be kept in a warm, dry room instead of a cellar. Keeping section honey free from moth and ants in Southern countries is sure enough a problem. But I have kept it nice and good for years, by keeping it in tight cases on benches or tables, with the legs in water to keep ants from getting in it. Preserves can be kept free from ants the same way. Just place a table in the center of a small room, for instance, or any room, and keep the legs in pans of water, and a little kerosene oil put into each pan will make it all the better and surer, as ants can spoil honey quickly, so we cannot well be too careful.

Stone jars or crocks are splendid to keep honey in for family use, but are a little hard to keep covered tightly; but I can place a beeswaxed cloth over the top, then the cover, and it does splendidly. I have kept green fruit in jars for a season by sealing tight with beeswaxed cloths.

I am satisfied that if you will follow the above instructions, you will have no reason to complain about keeping honey.

JENNIE ATCHLEY

Keeping Sugar Syrup Ungranulated in the Combs.

Query 948.—1. What will keep sugar syrup from granulating in the combs?

2. If mixing honey is the best, what is next best, providing no honey is to be had?—Colo.

I don't know.—EUGENE SECOR.

Use a little tartaric acid.—DADANT & SON.

1. Mixing honey. 2. I don't know.—W. G. LARRABEE.

1. "I don't know." 2. "I don't know."—JAS. A. STONE.

1. Twenty-five per cent. of honey. 2. Tartaric acid.—B. TAYLOR.

1. I don't know. 2. Use granulated sugar syrup.—J. M. HAMBAUGH.

1. I don't know. 2. Honey has been my best remedy.—S. I. FREEBORN.

1. We mix honey with the syrup. 2. Make the syrup with the percolator.—E. FRANCE.

1. Plenty of water. 2. I prefer hard cakes of sugar for winter use.—EMERSON T. ABBOTT.

1. One-tenth part in bulk of honey added to syrup while hot. 2. Buy some extracted honey.—G. M. DOOLITTLE.

1. Tartaric acid; but I don't think such doctored syrup is good for the bees. 2. Granulated sugar.—J. P. H. BROWN.

1. Plenty of water, and feed early enough for bees to thicken it. Honey is good, and so is tartaric acid.—P. H. ELWOOD.

1. I've tried many things, but they have been failures in my hands. 2. I would try percolating, and report.—MRS. L. HARRISON.

Feeding the syrup quite thin during warm weather. If one-half honey is added it is as good as the best honey.—C. H. DIBBERN.

1. It is said a little honey mixed with it. 2. Tartaric acid—an even teaspoonful to 15 pounds of syrup. I have had no experience in this line.—MRS. J. N. HEATER.

I have had no trouble. I pour boiling water on the granulated sugar, stir until all is dissolved, and feed warm. If you boil the syrup, it is liable to granulate.—H. D. CUTTING.

1. Mixing ¼ honey is good. 2. I am inclined to the opinion that if the syrup is thin—say half sugar and half water—the bees will ripen it as much as they do nectar.—C. C. MILLER.

1. Adding tartaric acid or cream of tartar with the syrup. 2. As you virtually answer your first question with the second, I will say, use the acids.—MRS. JENNIE ATCHLEY.

1. I don't know certainly. Many methods have been given from time to time, but as I have never fed sugar for winter stores, I am unable to give a positive answer.—J. E. POND.

Mixing honey is the best, but I have had no trouble from granulation when well boiled, using a piece of tartaric acid the size of a hickory nut to each 10 pounds of sugar.—J. A. GREEN.

If you will make the syrup quite thin—simply dissolve the sugar in hot water—and let it set in a warm place for two or three days before you feed it to the bees, it will not granulate to hurt anything.—G. W. DEMAREE.

One-third honey, or use of tartaric acid. I presume percolating syrup ⅓ sugar and ⅔ water would not crystallize. The bees take it so dilute that it is more fully digested, and that is what keeps it from granulation.—A. J. COOK.

There may be something in the way the syrup is made. I never had any trouble with granulating in the combs, though I never used anything to prevent it; so I do not know whether honey or tartaric acid would be the better.—R. L. TAYLOR.

1. Do not use granulated sugar—coffee A is better. Have the syrup tolerably thin, not less than a pint of water to two pounds of sugar. I have had no trouble with the feed granulating. It is better not to feed very rapidly, and to do it early. 2. I have fed a mixed feed.—M. MAHIN.

There is no sure remedy for the granulation of sugar in the combs; but when feeding becomes necessary (it is an evil at best), and there is no honey to be spared, I would fall back upon the best "A" sugar. It answers the purpose, and will sometimes save a colony. In preparing the syrup, be careful not to scorch the mixture—it is surely fatal to

the bees if fed in that condition. Feed honey when possible.—W. M. BARNUM.

Don't make the syrup too thick. It will winter the bees just as well if fed a little thin. No honey is required with the syrup to keep from granulating, but the honey adds to its good wintering qualities. Only the pollen-theory crank would keep all honey from the bees in winter. —G. L. TINKER.

Reports of Members of Illinois Bee-Keepers' Association.

I herewith send a report of the honey crop at the close of the season, from a portion of the members of the Illinois State Bee-Keepers' Association.

The answers which follow correspond with the questions by number:

1. How many colonies have you?
2. What are the prospects for a honey crop?
3. How much honey gathered to date?
4. Is the honey gathered No. 1 or not?

Thos. B. Allen, Stirrup Grove—1. 31. 2. Not good—no white clover. 3. About 36 pounds. 4. Not very good.

A. B. Anthony, Coleta—1. 26. 2. All right for next year. 3. 300 pounds of comb, 400 of extracted. 4. No. 1.

F. X. Arnold, Deer Plain—1. 102. 2. The crop is over. 3. About 3,300 lbs. 4. ⅛ honey-dew, the remainder yellow, from fall flowers.

C. M. Beall, Clayton—1. 8. 2. We have had nice rains, and I think the bees will get enough to winter on. 3. None.

Peter Blunier, Roanoke—1. 52. 2. Season is past. 3. No surplus, but about enough to winter on. 4. Dark.

Jas. Bertram, Bristol—1. 12. 2. Fair for next year. 3. 180 lbs. of extracted. 4. No. 1 amber, mostly from Alsike and sweet clover.

M. Bevier, Bradford—1. 40. 2. Very poor. 3. 90 lbs. 4. Dark color.

S N. Black, Clayton—1. 30. 2. Bees will require feeding to winter safely. 3. No honey gathered.

C. Covell, Buda—1. 35. 2. Fair, as the red clover bloom furnished honey this year. 3. Nearly 1,500 lbs. 4. Very good. but amber colored, being a mixture of basswood and red clover.

Dadant & Son, Hamilton—1. 350. 2. None. 3. None. 4. Have not harvested enough to make up for what feed they will need.

Peter Dahl, Granville—1. 135. 2. None. 3. 300 or 400 lbs. 4. No. 1.

P. J. England, Fancy Prairie—1. 28. 2. Bees are adding slowly to their stores. 3. 600 lbs. of extracted honey. 4. A shade below No. 1.

J. D. Everett, Oak Park—1. 30. 2. Good. 3. 900 lbs. 4. Yes.

E. T. Flanagan, Belleville—1. 250. 2. None—all over now. 3. 2,500 lbs. 4. No. 1 fall.

J. M. Hambaugh, Spring—1. 120. 2. Honey crop all in for this season. 3. Will be in the region of 7,500 lbs. 4. ¼ poor, balance fair, no gilt edge.

B. W. Hayck, Quincy—1. 97. 2. Fall season so far (Sept. 27) good. 3. 2,500 lbs., expect 1,000 more. 4. No. 1 fall.

Wm. Little, Marissa—1. 60. 2. Season past. 3. 600 lbs., and bees have enough to winter on.

Dr. C. C. Miller, Marengo—1. About 200. 2. Nix. 3. 20 lbs. 4. No.

Adna Phelps, Springfield—1. 10. 2. None at all. 3. None. 4. Answered above.

George Poindexter, Kenney—1. 73. 2. About ¼. 3. 250 lbs. 4. No. 1 heart's-ease.

James Poindexter, Bloomington—1. What would make about 160 full colonies. 2. All vanished. 3. No surplus—enough to winter on. 4. No. 1 heart's-ease mostly.

Daniel E. Robbins, Payson—1. 30. 2. None. 3. 225 lbs., basswood. 4. Very nice, as I only took the good, leaving honey-dew in the hives. A neighbor living nine miles south of me on the bottom, reports a fine flow from large smart-weed.

Geo. F. Robbins, Mechanicsburg—1. 64. 2. Rather late to prospect. 3. Get out! What! the only complete failure I have ever known in my 12 years of bee-keeping.

F. A. Snell, Milledgeville—1. 112. 2. Honey-flow over. 3. 1,500 lbs. 4. Very good.

P. E. Vandenburg, Jerseyville—1. 37. 2. Very poor. 3. About 100 lbs. of extracted. 4. Not what I call No. 1.

Walter M. Van Meter, Era, Tex.—1. 7. 2. Light. 3. 50 lbs. 4. Honey very good.

F. C. Vibert, Hockanum, Conn.—1. 7. 2. Poor—reasons given in July report. 3. 38 lbs. 4. No. 1.

E. Whittlesey, Pecatonica—1. 70. 2. The season is past. 3. 100 lbs. all told. 4. Third grade. JAS. A. STONE, *Sec.*

Bradfordton, Ill., Oct. 25.

Have You Read page 638 yet?

UNDERGROUND WINTERING OF BEES.

BY G. M. DOOLITTLE.

The wintering of bees in some kind of an underground repository has come to be quite an absorbing thought in the minds of all apiarists living north of latitude 40°, and, in my opinion, whoever lives in the year 2,000 will see nearly, if not all colonies of bees then existing north of this degree of latitude, wintered in an underground repository. If this is to be the case, it is of some moment that the ideas which are now assuming form on this subject be turned toward the best solving of this question.

Why I make a prophecy like the above is, that, with each succeeding year, the timber land of our country is growing less and less; so that when the year 2,000 is ushered in, very few if any of the forests which now exist here at the North will be allowed to stand. In these forests have been our protection from the extreme cold which now is beginning to be experienced in many localities where the timber is already becoming scarce. This timber has been of two-fold protection against cold, viz.: First, it holds the water in the ground so that many springs have existed which otherwise would not, and these springs where they abound, modify the air to a much larger extent than many suppose; and, second, the force of the wind is broken, so that when a warm day appears, the bees in a sunny nook, out of the wind, can have a nice flight, while those in an exposed situation can do no such thing.

Thirty-five years ago there was scarcely a winter in this locality when bees could not fly as often as once in six weeks, and the mill on the stream which flows, or used to flow, about 60 rods from where I live, was run by water nearly every day in the year. Now we often have from four to five months in which the bees cannot fly, and the mill is run nearly, if not quite half of the time with steam, on account of lack of water. I used to leave two-thirds of my bees on the summer stands, during winter, putting the other third into the cellar; now I put four-fifths of the bees into the cellar, leaving but one-fifth out, packing those out in the best possible manner; yet, with all my care, the cellar seems to be winning favor with each succeeding year.

Now, aside from the causes given above, there is another reason why the cellar is gaining favor. When I first began wintering bees in the cellar, I used one under the house in which we lived, while now I use one entirely away from any building, and this latter is so much superior to the former that it is winning my affections altogether. In what is it superior to the former? Chiefly in the fact that the temperature is entirely controlled without any interference of mine during the whole time that the bees are in their winter quarters. Some bee-keepers are favor-

able to a warm room overhead, presumably to keep the cellar warm, yet we find these same bee-keepers carrying ice into these cellars and opening doors at night to lower the temperature during warm spells in winter. Now, this is just where a cellar under a superstructure fails. Just in so far as a warm room is an advantage in extreme cold weather, it is of positive disadvantage in a warm spell in winter. Who wants to be obliged to keep a fire in or over a cellar all winter, every time the mercury sinks to zero? or open all doors and windows which the cellar contains, carry in ice, etc., every time the mercury rises to 50° or 60° above zero? There may be fun in the thing for a few times, but after a little it becomes "vanity and vexation of spirit."

And even after we have had all this trouble, our pets are not nearly as well off as they would have been had the temperature been kept evenly at 45°. Of course, where one has no other place in which to winter bees, they must do the best they can with what they have, but the point which I object to is that followed by some in recommending a thing which requires so much fussing and anxiety of thought, above something which requires nothing of the kind, and over one, which, after a thorough trial by even the most prejudiced, would be recommended as much superior to the old way.

Some claim the matter of a living-room over the bees has little if anything to do with the matter of good wintering to the bees. Such claim can only be made from lack of knowledge. For many years before I moved to where I now live, I wintered my bees in the cellar under the house we lived in, and during nearly every one of these winters there would come times when I had to build a fire in this cellar to keep it warm enough, or else open the doors at night, or carry in ice to keep it cool enough. Several times it kept warm so long that there was no snow or ice to be had, and the outside air during the night was warmer than the air in the cellar, then I had such a state of affairs in that cellar that caused me to declare that I would never try cellar-wintering again; bees roaring in the hives and flying out to the cellar-bottom and crawling about there until I feared I should lose the whole thing. At such times at this, where one is obliged to winter bees in such cellars, the only salvation is to have total darkness inside. But with a cellar entirely under ground, with earth overhead as well as on the bottom and at the sides, nothing of this kind ever occurs; and I would advise all, where it is possible, to construct such an underground cellar for wintering bees, where they are permanently located and have 25 or more colonies.

In the underground repository which I use, and which has been several times described in the bee-papers, the mercury rarely varies more than 2° all winter, standing at from 44° to 46° during the time the bees are in it, and as no ray of light ever enters, it is simply one long, dark night to the bees for five to six months, and they seem to winter perfectly.

The above is offered as suggestions to those about to build bee-cellars.

Borodino, N. Y.

MIGRATORY BEE-KEEPING—BEES BY THE POUND.

BY EDWIN BEVINS.

That article by John McArthur, on "Migratory Bee-Keeping," on page 306, makes me feel chilly. After Langstroth, Dadant and other writers have gotten a generation of bee-keepers educated away from the sulphur pit, here comes a man advocating the wholesale murder of bees to save the trouble and expense of wintering! I am glad the winter problem here is not as serious as it is in Toronto. Don't think I would kill the bees, though, if I lived in Labrador.

On page 405 of the "American Bee Journal" are to be found some questions and remarks by Mr. Chas. F. Jaessing, on this same subject of migratory bee-keeping. Mr. Jaessing seems to think that he would prefer the scheme outlined by Mr. McArthur, viz.: that of getting full colonies of bees from the South just before the honey harvest, to the one of getting the bees in lots of one or two pounds, and a queen with each lot. My experience in this matter is too limited to be of much value, but such as it is it inclines me to the belief that I would prefer Mr. Jaessing's plan to that of Mr. McArthur's, especially if the latter is to carry with it the slaughter of the bees every fall.

It was a question by Mr. Jaessing and its answer by Mrs. Atchley which appeared in the "American Bee Journal" last February, that led me to send South for two lots of bees by the pound. One was a two-pound lot, the other a three-pound lot, and each lot had a tested Italian queen. Each lot came on two frames of comb with just honey enough for the journey, and on arrival were placed in 8-frame dovetailed hives, between two frames of honey left by a colony which had become queenless and died the winter before.

These bees reached me May 19, and we fed sugar syrup every third or fourth day until about June 20, at which time they were as strong as any colonies in the yard, and there were some pretty strong ones. Sections were placed on the hives about June 20. This has been the poorest of all poor seasons for honey here, but the three-pound lot of bees completed more than sections enough to pay all its cost. The other fell a little short of that result. Had the season been an ordinarily good one, I am sure they would have paid two or three times their cost. I shall try the experiment next spring on a larger scale, but shall not send so far for the bees, and shall get untested queens—the expense can thus be considerably reduced. In the absence of frames of honey I will try frames of comb, and feed some extracted honey. I would not get bees in less than two-pound lots—three pounds would be better.

"SHAKE!"—Here's my ☞, Mrs. Livingston. I am more than willing to shake hands with any bee-keeper who is in love with the bees for something besides the money they bring in. I might draw the line at the man or woman who would kill his or her bees just before winter, then buy a new supply in the spring to be slaughtered when cold weather comes again. To tell the truth, I do not believe such an idea would ever originate in the brain of a woman. Yes, I think I would shake hands with Mr. McArthur, for I think he is a very estimable man, notwithstanding his bee-killing notions. We will "have it out" in a friendly way when we meet at Toronto, next fall!

Leon, Iowa.

BEE-NOTES FROM AN OCTOGENARIAN.

BY E. L. HOLDEN.

Perhaps I cannot write anything that will interest the readers of the "American Bee Journal," as I am an old man, an octogenarian, but the editor gave a general invitation to his patrons to write, and as I have been in practice among bees for more than 60 years, I will give a few items of my experience.

I once wintered in my house a colony that I found in a tree. I cut out a section of the tree, about 2½ feet long, and set it in the buttery (or pantry, now), and fed them at the bottom every few days, by slipping a saucer of honey in through a door cut for the purpose. The next spring they were in excellent condition, though they had no chance for a flight all winter.

Next, I will astonish some by saying that I once hived a fine swarm in a hive

filled with comb and considerable honey of the last year. I moved the old hive away and put the new swarm on the old stand, with one tier of sections from the old hive, partly filled. In just seven days a swarm came out, and I hived them in a box till I could look over the combs they came from. On looking I found queen-cells, and as many as two were sealed cells; the eggs from which they came could not have been laid more than seven days, for the combs were old combs, remember. After cutting out all the queen-cells I returned the swarm, and gave them another tier of sections, and in two or three days gave another tier. The result was, I took over 180 pounds of section honey from that hive.

Now a few words about the Langstroth frames: In 1858 I bought of Rev. L. L. Langstroth the right to use his hive, for which I paid him $5. At the same time I bought two hives, both of which I still have, and have just taken the trouble to measure them. The inside measurement of the hive is 18⅛ inches one way, and 15¾ the other, and 10½ deep. The frames are, inside measurement, 12¼ and 10½ inches. This is the common hive, the other is his observing hive, of two or more stories, the frames are of the same length, but the depth is only 8¼ inches. These frames are the very ones I bought of Father Langstroth 36 years ago, and of course are the correct size of the Langstroth frames.

I have never been an extensive bee-keeper, but in connection with farming have always kept a few bees. I am now using a hive called, around here, the "Manning" hive.

North Clarendon, Vt.

BLACK COATS VS. STRIPED AND LEATHER COLOR.

BY ROBT. PESTELL.

"Fine feathers make fine birds," is an old adage. Is the opinion current amongst bee-keepers of the present time that fine jackets make fine bees? The black bees to-day are looked down upon as being an almost worthless race, if one is to be guided by the general tone of the bee-literature of the time, as great distinction being made between the races of blacks and Italians as between civilized beings and savages. Would this distinction be made were it not for the difference in color? I think not. The color of insects and animals is the one infallible nature clothes them with to meet the exigencies of their lives concomitant to their surroundings.

The honey-bee is not a native of this continent. We must, however, concede to the black the right of claiming fitness to surroundings by priority. I am a staunch friend to the blacks, appreciating their many good qualities. Foremost amongst them are their provident habits, they rarely breed up to their full income in early spring as do the Italians, consequently their lesser liability to spring dwindling; their superiority as masons compared to their more splendidly attired relatives; their lesser propensity to swarm, and their greater hardihood. Surely, they are a bee more fitted to survive in this climate when left solely to Nature's care than are other races which have been introduced recently. If admitting them to be so, why are they not as well, or better, adapted to be made a source of profit to the bee-keeper, as are the fashionables of to-day?

In a country like this—Mr. Vanderbilt's broad lands where many thousands of acres of forest abound—I am decidedly in favor of the blacks for the reasons above stated, added to which is the almost impossibility of keeping other races pure from crossing with the wild blacks which are quite numerously domiciled in the forests.

Writing "wild bees" unfolds the book of my memory at the page of a bee-conversation of a recent date with a gentleman acquaintance. I then stated as an opinion of mine that the blacks—or wild bees, as he termed them—were better

adapted to this section of country than other races. He said: "Don't you think the bees can be improved as have been the cattle?" My answer was, "When the white man first put in an appearance upon this continent, he commenced to exterminate the native cattle—the buffalo—filling at that time its place with cattle of the North Carolina scrub type. It is open to doubt whether there exists a bee better fitted to thrive in these surroundings than the present wild (as you term it) inhabitant of the forests. If this wild bee is destined to be exterminated, I hope its place will be occupied with something more desirable than the North Carolina scrub as compared to the buffalo. From this simile I infer it to be dangerous to supersede the old until the new is proven to be better."

It constantly proves one of the hardest lessons of our lives to judge our surroundings, including our bees, Sartor Resartus-like, notwithstanding the early lessons precepted by our copy-books, to do the contrary: "Judge not by appearances." Epictetus also tells us the nature and being of the good is not in external things—the utility of things, I take him to mean in the sense he uses the words, conducive to worthy and profitable ends. The surface of things is to be but little considered—it is to be discarded, to be dug beneath to find out how a matter hinges.

Cannot Mr. Doolittle tell us a little about the good qualities of the blacks, and cannot Dr. Miller also say why it is the stream of opinion is so tending to drift the same into oblivion? I admit they bear the character for being truculent, nettlers. "One touch of nature makes the world akin" (Shakespeare). I stung a man in Biltmore last summer—by mistake, I'm told—for which I got a quantity of smoke; in fact, I was fired, narrowly escaping getting much scorched by taking refuge behind a non-inflammable, barren substance.

Where is Mr. Thompson? Will he give a kink, or kick, on this subject?

Biltmore, N. C.

BEES IN THE SANDWICH ISLANDS.

BY REV. WILFORD HORSFALL.

I came to these islands about the beginning of May, 1894, and soon after coming to Lahina, the place I am now living in, I bought a colony of bees for $4, transferring them to a frame hive. Since then I had a few swarms given to me by an old bee-keeper in the place, who says he cannot make honey pay. Three of these swarms I united so as to make one good, strong colony. The fourth I united to the colony I had bought in the first instance. Already these bees have produced some very delightful section honey, which is now being sold at one of the village stores.

The honey here is really beautiful, it is clear and white, with a distinct flavor. The wax is of snowy whiteness, without an approach to yellow. Never since I have kept bees have I seen such lovely sections as the 22 I took from the hives the other day. I am at a loss to discover from what flowers the bees get the greatest part of their honey, but it is evidently from trees. We have large numbers of tamarind, mango, algaroba, pandanus, royal palm, and many others. The humming of bees in the tamarind trees speak clearly of their being favorites; while, when the royal palms are in flower, one would think it was a swarm of bees, rather than bees attracted by nectar, hovering about the heavy plumes of flowers.

Bee-culture is making progress in these islands. I have been told of several persons who have apiaries, but whether they make them profitable I cannot say. Honolulu is well suited for bees, owing to its wealth of tropical trees and shrubs. Lahina, once the old capital, is not so well adapted to a large apiary, not to speak of apiaries. The settlement runs about two miles on the sea-beach. The houses

for the most part are surrounded with trees about 300 or 400 yards. Behind the beach road stretch sugar-fields for about a mile inland to where the mountains begin to rise. Here there is no vegetation. Nothing but dry earth and volcanic rocks. So then we only have a honey-field some two miles long by one broad. Here and there in the sugar-fields are houses surrounded with groves of trees. The bees are thus limited, but nevertheless they do well. But where a small apiary of 20 to 30 colonies would be successful, the apiary of 150 or 200 might be a failure. The old bee-keeper already referred to has about 30 colonies of bees in soap and other boxes, old style. Other people have bees, but one person has rarely more than two or three colonies.

The bees on this island are the ordinary English or German variety, but probably owing to the climate, having some decided characteristics of their own, the queens and drones are small, some drones ridiculously small. The bees are bad tempered, and require much smoke before they can be mastered. In fact, the tropical climate has caused them to degenerate. I feel sorry for the queens, that never seem to get any rest from their labors at all. I am informed by my friend, the same old bee-keeper, that there are two swarming seasons in the year.

Now, as to bee-pests: We have the moth, a much smaller one than the cousin in New Zealand, and certainly more destructive in its depredations. Any little bit of wax it can find is a happy find for it, and in the smallest chink of the hive is the the dreaded grub to be found. Then the Mynah birds, the Indian starling, make many a good feed on bees. They perch on or near the hives and pick the bees up in the coolest manner possible. Other pests, such as foul brood and bee-diarrhea are, I believe, unheard of here.

As to these islands being well adapted to bee-culture, I should have some doubts. Except in places here and there, there is no forest worthy of that name, and a greater part of the islands are barren and desolate to a degree. True, in the mountains there is a stunted forest, consisting of metrosideros and acacia trees, but too hard of access for any one to pick on it for any apiary. The famed Honolulu was at one time merely a desert. Every tree and shrub in and about the city has been introduced. And so on with other places. Nearly all our trees and flowers are foreign introduction, while the native flora is not to be found except occasionally on the mountains and in the gulches away from the ordinary haunts of man.—Australian Bee-Bulletin.

SOME CALIFORNIA NOTES.

[Mr. W. A. Pryal, one of our California friends, has been traveling around the northern part of the State lately with Messrs. J. H. Martin (Rambler) and H. E. Wilder. Mr. Pryal kindly sends us some notes on his trip, from which we select the following:—EDITOR.]

I found several small apiaries in Humboldt county. The part of the county where they were is not a great way from the ocean. I should think that it is not as favorable a place for bees as it is here in this vicinity, excepting, though, that there they seem to have a more sure yield of honey-producing flowers every year.

I saw in the "American Bee Journal" some months ago, where one of your correspondents disputed the fact that white clover was grown in this State. I knew that we had small patches of it through this county (Alameda), but I never knew until I was in Humboldt county, that it was cultivated as a crop. It is quite a dairy county; that is, a small portion of it is, for the county is almost "a complete aggregation" of mountains and big hills.

It is the great redwood county of this State. There it is where one should go

to see big trees. The account "by one of the younger Roots," in a recent issue of "Gleanings," about a sawmill in Michigan, does not begin to describe how logs are worked up into lumber in a California sawmill. I saw them take logs 8 or 10 feet in diameter and saw them up with band-saws. Great big slabs, one or two inches, would be taken off that would be of various sizes or widths, as the saw worked its way toward the center of the log. These big boards would be all handled by automatic machinery, and come out boards of the desired size. I did not see any precautions taken against fire; none are needed I should judge, as the logs are taken out of the water where they have lain for months or years. Then redwood is hard to burn (that is one of the reasons we have no big fires in this State; all our wooden buildings are mainly constructed of that wood). Another thing, the wood is not piled in big heaps at the mills; it is nearly all put aboard vessels at the mills about as fast as sawed, and shipped to various parts of the coast. I did not go into the forests where the biggest timber is to be seen; I saw some, however, that was 12 or more feet in diameter. I have seen bigger trees in Santa Cruz county, south of here—some 80 miles away. But enough of this; I was going to tell about the white clover.

In one section along and west of the Eel river, where the redwood trees had been cut off some years ago, and where potatoes had been grown for a number of years, there is nothing now but cow-ranches, so to speak. The land is low and rich. Then Humboldt county is one of the most rainy in the State. It is no uncommon thing there to have 70 or more inches of rain every year. You know that in the southern portion of the State they often fail to have 2 inches. Well, this abundance of rain always insures them crops of every thing they wish to raise. Both red and white clover have been sown, and they do well; the former having the preference. But white clover is now spreading in every direction, and it won't be long before the whole section of country along the lower Eel will be well covered with white clover. It is now growing all along the roadsides. It blooms the year through, and, of course, furnishes good pasturage for the bees.

If it were not for the weather being cool a good portion of the year, there would be enormous yields of honey in and around Ferndale. I was told by one bee-keeper near there, that it is no uncommon thing for him to take 100 pounds of honey from a new swarm. He said the honey is finer than that from the southern portion of the State. I do not know about this; I have only his word for it. He said that with a hundred colonies of bees he could make more money than is made off any three dairies in the valley.

I left the Rambler and Mr. Wilder at Hydesville, where they had been for five weeks, last Saturday morning. I took the steamer from Ferndale at 2:30 the same afternoon, and arrived in San Francisco a little after 8 the next evening. At 9 I took the ferry boat Piedmont (the finest ferry steamer in the world) for Oakland, and I arrived home at 11 o'clock that night. I was away a little over two months. I enjoyed the trip immensely. I saw more of the country than did my two friends, as they were more tied down to business than I was; they were taking pictures right and left in and about Hydesville.

I find that my own bees are in better condition than I expected to see them. The early rains we had brought out a lot of early, or, perhaps better, late flowers, which they have been collecting honey from very industriously. I think they will go through the winter better than they have usually done heretofore. Here, near the ocean, it is not so easy to carry bees over the winter as it is more inland. The climate is much damper in winter, as might be expected.

Mr. Wilder wanted to go to a part of Humboldt county where bear hunting is said to be good. He is about as anxious to kill a bear as anybody I ever saw. At

Hydesville I was talking with an old settler there who had killed 512 bears in and about that county. He has but one arm, and the other hand is crippled so that he has but one finger.

We have been having more rain this morning ; it looks as if it has set in to be quite a wet time. I think Mr. Martin does not like the climate in Humboldt county much now. He refers to it in a joking sort of way, as "The Land of the Mist." 'Tis rather foggy there at times, but that is what makes it such a good dairy country. Then it is not as cold as it is near the ocean. You have read of course that it is not cold along the coast of California, owing to the Japan current washing our coast. Here I might remark that the "current" of Japanese that has been flowing into China the past few months have been making things rather warm there, too !

North Temescal, Calif., Oct. 23. W. A. PRYAL.

BEES AND FRUIT—BEE-DISEASES.

BY PROF. A. J. COOK.

(An essay read at the recent Farmers' Institute, in Santa Barbara, Calif.)

(*Continued from page 599.*)

FOUL BROOD.—This is a microbe, or fungoid malady, and is by all means the most fatal and serious of our bee-maladies. It was known to Aristotle, and has wiped out whole apiaries in our own time. Its true nature was not known until within a few years, as is true with all microbe diseases, and like most microbe maladies, it is terribly contagious and terribly fatal. But as we have come to know its true nature, intelligent, well-informed bee-keepers have lost their fear of this evil. So true is this, that Hon. R. L. Taylor, director of the Michigan apiarian experiment station, keeps a living sample in his apiary for his special study and amusement. He has no longer any fear at all of "foul brood." Is this not encouraging? Imagine in the future our keeping a little typhoid, tuberculosis, scarlet fever, diphtheria, or cholera, about the premises, with the fangs down, as a thing to play with. I see no reason why we may not, if knowledge can rob terrible diseases that now lie in wait for human victims. I believe it can and will.

"Foul brood" takes its name from the two facts—its disgusting odor, and the further fact that it attacks and destroys the brood while yet in the cell. It is not difficult to identify the disease. The cells, if capped over, will usually be punctured and sunken, or concave. The contents of the cell will have no form or semblance of a bee-larvæ. It will be brown in color, salvy in constituency, so if drawn by aid of a pin or toothpick from the cell, it strings out, and when it breaks from the pin, will fly back with some force. This brown, ropy, viscid, putrescent mass is sure evidence of "foul brood." The odor is also characteristic, but may not be noticeable in case of only a few affected bees. It is very disagreeable, and often betrays the disease as soon as we raise the cover from the hive. I have often received specimens of foul brood by mail in a close box, and wrapped closely with two or three layers of paper, and yet members of my household would detect the contents at once upon taking the package from the mail-carrier, by the odor alone.

CURE FOR FOUL BROOD.—The late Moses Quinby, the renowned pioneer bee-keeper of the United States, first gave the method to cure foul brood. His method is practically that which is everywhere so successful to-day, and, what is the more remarkable, he discovered the cure without knowing at all the true nature of the disease. As we now know it to be a microbe enemy, which we can detect and study with our microscopes, we easily understand why the "Quinby cure," as I should call it, the so-called starvation method of cure, is so entirely effective.

To treat this disease the bee-keeper should be a man of rare good sense and intelligence, who has studied the disease until he knows its exact course and nature, like Mr. R. L. Taylor; or else he should visit some first-class hospital and see with what care the operating surgeon disinfects his hands, his bandages, his instruments, everything he uses, before he commences his surgical operation. The realizing sense that the microbes are infinitesimally small, and that the escape of one from a diseased colony to a healthy one as surely carries the malady, will alone insure the caution requisite to treat safely this evil. Unless one will use every caution to prevent spread, it is doubtless wisest, as some have advised, to burn up all affected colonies. But this is unnecessary. It is wiser to use all care and precaution, and wipe the disease entirely out, root and branch.

The method is to drum the bees from the hive into any box, and set them in a cellar or other cool dark place for 48 hours, and then hive in a clean hive on comb foundation. Drumming the bees out causes them to fill with honey, and secures them from the hive without any danger of scattering the honey which must be entirely avoided. This should be done when the bees are busy gathering, so that no robbing will occur, and the bees can get food when hived on the foundation. Else it may be done under a bee tent, or late in the day when the bees are not flying, and the transferred colonies must be fed. The old hive must be set aside where no bees can possibly get at it for 25 days, when all the young bees will be developed, when the operation can be repeated and a second colony secured, which will have, of course, a young queen.

The honey may now be extracted and boiled, the combs melted into wax, and the hive thoroughly burned out by use of kerosene or straw, or else boiled. In all this, great care must be exercised that no bees get to the honey or hive until they are entirely disinfected. Of course there is no great difficulty in this. But it does require a use of the wits and exceeding caution, which many having not used have signally failed, and so have condemned a method instead of their own incautious procedure.

Mr. Taylor always keeps dilute carbolic acid in a dish ready to wash his hands after handling a colony with "foul brood," before he touches another hive. We have only to remember that the honey and cells of the diseased colony have myriads of the microbes, and that if these gain admittance into another hive, either by our careless handling, or the bees carrying honey, then the disease is spread. Thus, attempting to cure by this method without great caution, only spreads the disease and makes a very bad matter infinitely worse.

In closing, let me say that Southern California is the bee-keepers' and fruit-growers' paradise. As in balmy Italy, so here, there should be fullest reciprocity between these classes; each needs the other, and for either to drive the other away is really killing the goose that lays the golden eggs. Claremont, Calif.

THE ABSCONDING OF SWARMS.

BY LEWIS K. SMITH.

In a recent number of the "American Bee Journal," T. J. Lusk desires the ideas of other bee-keepers about the cause of his numerous swarms leaving. He lives in Louisiana, near an immense swamp where bee-forage is abundant. He thinks they are properly cared for, but that "they want to swim in the honey in the swamps."

While my surroundings are not so favorable for honey, and there is no tempting ocean of honey near by, still I think perhaps my experience may be beneficial to Mr. Lusk and others.

In the first place, I will say that I never lose a swarm when I take all the precautions that appear necessary at the time. I am governed more or less by the season—whether early or late—the kind of weather, the size of the swarm, etc. When swarming-time approaches, my hives—10-frame dovetailed—are prepared, ready at a moment's notice, and at once I proceed to business when the swarm settles. If two or three come out near the same time, and do not cluster together, I first hive those most exposed to the sunshine, after giving each swarm a good drenching with cool water sweetened with granulated sugar. I always put one or two frames of *unsealed worker*-brood into the hive, being sure there is no queen-cell on either of them.

Give the bees a large entrance, sprinkle them well with sweetened water, and, if a hot day, give the outside of the hive a generous dose of the same. As soon as they have about all entered, remove the hive to a shady place some distance away. Be sure of abundance of ventilation at the bottom, having the hive much more elevated from the bottom-board than you intend it to remain permanently. Have the hive-cover to fit well, so there shall be no light from any place except the bottom.

Another important consideration is to have abundant room, especially if the swarm is large, or the weather warm. This you can provide by empty supers, or one or two empty brood-chambers without combs, on top of the hive you intend them to occupy permanently. After a few days you can regulate the room as required. Abundance of room, shade, ventilation, sweet water, etc., always save them for me, and I would be glad to hear whether they charm Mr. Lusk's bees from their inclination to hie away to the swamps.

Gainesboro, Tenn.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Dr. Gallup and "Business."

MR. EDITOR:—What has become of our old friend that wrote such charming letters from Santa Ana, California? I hope he does not intend to keep mum all the rest of his life! Say, Doctor, you are too old a man to be squelched by one nervous man's growling. I don't believe one other reader of the "American Bee Journal" feels just as that awful "busy" man did. I believe he is so very terribly busy that he eats concentrated foods, and—well, it don't seem to agree with him very well. You see, he does not eat soups, vegetables, fruits, etc.—it takes too much time, so he uses them dessicated. I believe all the other bee-keepers are interested in the surroundings and the families of the contributors who do so much to help us on to success.

MRS. B. J. LIVINGSTON.

Center Chain, Minn., Nov. 1.

[Why, dear Mrs. Livingston, it takes more than "Business" to "squelch" Dr. Gallup. He's not the squelching kind. We had a personal letter from Dr. G. a few weeks ago, saying he had been so very busy that he didn't have time to write, but thought he would soon get around to it again. Oh, no, Dr. Gallup don't "go down" so easily as one might think, for he's not quite 75 years young yet! We say "young," for in heart he'll never grow "old."—EDITOR.]

A Kind of Flies.

Enclosed please find insects, and if agreeable, please inform me what they are. I have noticed quite a number flying about my yard, and upon the flowers. Their appearance resembles bees, to some extent, and they appear to gather the nectar from the flowers. On opening my hives a few weeks ago, just at the close of the honey-flow, several flew immediately on the frames. One that I

watched staid there for a minute or more, before it was driven away, and busied itself with the honey in uncapped cells. Many here have noticed them, but do not know what they are, more than to call them "flies." W. G. G.

Providence, R. I.

[We sent the insects to Prof. Cook, who says this about them :—EDITOR.]

The insects sent are *Syrphus* flies. They like sweets, and are usually seen about flowers. I have never before heard of their visiting hives. They are evidently thieving. They like the sweet. The maggots feed on plant-lice and do much good. The flies mimic bees very closely, which I remark upon in my "Manual."—A. J. Cook.

Bees Did Fairly Well.

My bees have done fairly well the past season. I took off some 800 pounds from 30 colonies. There was no swarming. D. C. WILSON.

Viola, Iowa, Nov. 1.

Poor Season for Honey.

My report for 1894 is as follows: I commenced the spring with 24 colonies, and increased to 25, all in good condition for winter. I got about 500 pounds of extracted honey of good quality, mostly gathered from fall flowers. The season of 1894 has been a poor one for honey. FRED BECHLY.

Searsboro, Iowa, Oct. 30.

Bees Way Up North.

As I have never seen any reports from bee-keepers in the "American Bee Journal" living as far north as I do, I thought perhaps it would interest somebody to know that bees can be kept up here at a very good profit. Of course, last summer was the first time that I had bees enough to make a little showing. I am located 22 miles from Escanaba, a seaport town on Green Bay—the most northerly point, about the 46th degree north Latitude.

I took the bees out of the cellar April 15, 1894, after being in there 5 months, and found them all in nice condition. On April 17 they began carrying in pollen. They built up nicely, and the first one swarmed on May 25, in spite of the heavy frost we had in the forepart of May, which killed all fruit-bloom. The crop from 7 colonies, spring count, was 400 pounds of comb honey, and 360 of extracted, all white and first class. I have not one pound of dark honey. I increased to 21 colonies. I have doubled up and sold colonies to reduce the number. I have now 11 colonies which I will put into the cellar about the middle of November, and I am anxiously looking towards spring.

My bees are mostly Carniolans. They are a good, hardy bee, quiet in handling, but very much inclined to swarm. I think I will like the Italians better, as they will stay together in larger force and work, without swarming.

I have kept bees here for four years, and have read the "American Bee Journal" steadily, and I attribute my success largely to it. I cannot afford to keep bees without the "Old Reliable."

NICHOLAS PETERSON.

Spalding, Mich., Oct. 29.

All Heavy for Winter.

My crop of honey for the season of 1894 is 1,400 pounds, from 84 colonies, with an increase of 12 colonies. All the colonies are heavy for winter.

O. H. TOWNSEND.

Alamo, Mich., Nov. 5.

A Good Crop—Considering.

My bees have done well the past season, considering the long drouth we had through the months of July and August. Buckwheat was almost a total failure. My year's crop figures up 900 pounds, light and dark, in one-pound sections. My number of colonies was 26, or an average of 34½ pounds per colony.

CHAS. C. CHAMBERLIN.

Romeo, Mich., Nov. 1.

Slats in Section-Holders.

Do slats in section-holders sag in an objectionable manner? is a question that has been asked. As this part of bee-keeping has come under my observation as a honey-producer, I will give my experience, which is this:

In a locality where bees gather propolis, the sections do not rest on the slats heavy enough to sag them, and if the bees did not glue sections and separators together with the super, the slats would sag, as long as the sections depended on the slats for support, unless they are ⅜ of an inch or thicker. But I do not look upon the slats as support for sections, as I wedge the sections in the

super, and use the slats merely for a protection from bee-glue and travel-stain.

If anybody knows of a better way of keeping the sections clean while in the hive, please let us hear it through the "American Bee Journal." The slats I use are only ¼ inch thick. When I bought them they were ⅜ inch, but I had them ripped on a bandsaw and now like them. AUGUST BARTZ.

Chippewa Falls, Wis.

Bees Did Fairly Well.

I have been keeping bees three years. I found a bee-tree in March, 1891, and got a bee-man to put them into a Langstroth hive for me in June. I have increased and bought to the number of 22 colonies, which are in good condition for winter, all packed nicely. I manufacture all my own hives and frames. My bees are all Italians except one colony, which are Carniolans. My bees averaged 15 pounds per colony this season. The drouth cut the honey crop short here in Kentucky.

I couldn't keep bees without the "American Bee Journal." I think it is the best bee-paper printed.

S. T. APPLEGATE.

Tollesboro, Ky., Nov. 5.

Some Apiarian Suggestions.

The weather the past three or four days has been fine, and to-day is one of the most beautiful ones known at this season of the year in this vicinity in many years. There has been but one frost of any account yet, and that did not reach the hills. Pastures are more like June than the last of October. A few flowers are left yet, and it is a rare treat to see the bees gathering honey and pollen from mallows in the yard.

Not being in the business just now, I cannot say how bees will go into winter quarters. Probably they are not strong in bees. One great trouble here, the last ten years or more, has been too dry nearly every fall. This stops brood-rearing and causes weak colonies unless they are strengthened by doubling. Probably others will take exceptions to late breeding, etc., but as I never lost a colony in several years, I do not care how I get the bees, only that the colony is strong.

I cannot give full particulars of the yield this year, but it is below the average.

I wish to say right here that if you are in the business of bee-keeping, and have any aptness or liking for it, *stick to it.* Of course, there are times that are vexatious, etc., but one will never be satisfied without bees after getting thoroughly interested in them. Among some other things I did not fancy when I kept bees, jealous, bee-bungling neighbors that did not get much more honey from theirs than they would from yellow jackets, laid almost everything to my bees. If a person was stung a mile from my apiary, it was one of my bees. Of course! and it is mighty lucky I did not have any during the past two or three years of financial and business gloom, or they would have been "hauled over the coals" for it! Well, I got rid of them, at a cheap price, and got cheated out of a part of them at that. I have never succeeded so well since—some way or other I could never fill in the time to get the same profits that I reaped from the bee-business, and I could not get my thoughts in shape for the press as usual.

It is very strange that more women do not study the business. They learn more readily, as a general thing, than men, and they stand higher in the estimation of the people than they would with most other trades.

J. H. ANDRE.

Lockwood, N. Y., Oct. 29.

In Good Condition for Winter.

We have not had a bit of honey for the last two years. Both last year and this I have fed for winter, and both seasons I lost in the summer by starvation, and would have lost every colony if I had not fed in the summer. Drouth and frost have ruined everything here this year, and it is a serious question how we are going to get through the winter. The bees are in *very* good condition now.

Adams, Nebr., Nov. 3. GEO. GALE.

Not Discouraged.

The past year was a partial failure in this locality for *good* honey. My 18 colonies produced about 800 pounds—200 pounds of it was good, but the balance was too dark to sell. They will have to consume it themselves, as I have given each colony between 30 and 40 pounds on which to winter, and as each is very strong with young bees, I have no fears of the results. Fortunately, the white clover is promising for next year, and we are not discouraged.

ROBT. B. WOODWARD, M. D.

Somerset, O., Nov. 3.

Gathered Honey-Dew.

My report for this year is not a good one. My bees did not swarm, and worse than that, gathered no honey. They gathered some honey-dew, which I fear will kill most of the bees in this locality next winter. I never saw such stuff in my life. It was black, stiff and stringy, and has a rank, strong taste. I would much rather the bees had not gathered it at all, so they could have stored some sugar syrup. I shall sow Alfalfa next spring, so the bees can gather honey in dry seasons. I have 20 colonies at present. FRED BIESEMEIER.

Sterling, Nebr , Oct 28.

Laying Workers.

The prevailing opinion seems to be that laying workers are ordinary workers that take it into their heads to perpetuate a colony, and may appear at any time in any queenless colony, laying at will. I have had considerable experience with laying workers, and have never known them to appear except when they had larvæ only far advanced at the time they became queenless, or had such larvæ given them any time after. So I conclude they are the result of the bees trying to rear queens from larvæ which are too far advanced.

Ft. Lupton, Colo. I. W. BECKWITH.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Coughs—Cause and Cure.

This is the time of year coughs develop. The reason is found in the sudden changes of temperature, the inclemency of the weather, and the neglect of precautions to protect ourselves from these and other causes that conspire to this end. There are various degrees of coughs—some trivial, others serious; but even the least troublesome may, if neglected, become serious enough. The better way is always to care for, and cure, a cough whenever possible, and usually it is not difficult.

The principal factor in the cure of a cough is quiet, in a comfortably warm room, simple diet, and some soothing remedy. For a usual cough not attended with serious pain in the throat or chest, in young or adults, a mixture of nice extracted honey and a strong tea made of elderberries, half and half, boiled together for an hour, makes a very pleasant and effective syrup. A teaspoonful should be given every hour. For more severe coughs, those in which great scraping of the throat exists, with soreness of the lungs, a glassful of strong boneset tea with as much pure honey, boiled as before mentioned, and given as often, generally results in complete cure. If a dose of No. 11 from the Home Remedy Case (see page 610) is taken, three or four times per day, all the better.

Then there is that harsh, croupy cough of children, frequently experienced during these latter months of the year. A little exposure to the cold rains or sleet on their way to or from school ushers in those symptoms that every mother, on a farm, has witnessed, and never without more or less alarm. The child has had supper, complains of feeling chilly and drowsy, is put to bed—often between two cold sheets—(the worst beginning that can be made!) and after a fitful nap or two it wakes with a barking cough, a tightness in the throat and chest, a choking sensation that impels the child to sit up for more comfortable position. The pulse is too quick by 20 to 40 beats; the respiration is more rapid than usual, the speech is in gasps, and the child *looks* at objects it wants, rather than ask for them. It will, in this way, instinctively call for water, or more clothing. Its eyes are now wide open and staring—sleep has completely departed.

If you have one of the Home Remedy Cases, give the prescribed dose of No. 1, every half hour or less, and No. 13 every two hours. Also make a syrup of a pint of honey to a teaspoonful of Jamaica ginger. Shake well, and give a teaspoonful every half hour until the child is fully relieved, and gone to sleep. In this way a few doses of these Remedies save to child and mother much suffering and anxiety.

I know of nothing more dangerous than a bad cough that is not cared for. There is never knowing what results may follow, from pneumonia to consumption. A disposition that the less informed may have to make light of these facts, in no wise diminishes the force of consequences. The wise will act promptly, and lessen all risks.

There are other forms of coughs—the more seriously advanced and chronic, which are usually symptoms of some established disease of the throat or lungs, which we cannot dwell upon here, much as I would like to do, because of the great need, but such cases must have the utmost consideration of your family physician or specialist in this branch of practice.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Oolo.

CALIFORNIA.—The next regular meeting of the Central California Bee-Keepers' Association will be held on the first Wednesday in December, at Hanford, Calif. You are cordially invited to attend.
Lemoore, Calif. J. F. FLORY, Sec.

PENNSYLVANIA,—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

ILLINOIS.—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend. B. KENNEDY, Sec.
New Milford, Ill.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1½ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.
Indianapolis, Ind.

N. E. OHIO AND N. W. PA.—The Northeastern Ohio and Northwestern Pennsylvania Bee-Keepers' Association will hold its next regular annual meeting in the parlors of Hotel St. Nicholas, at Corry, Pa., on Nov. 21 and 22, 1894. A good program has been arranged. Bring your questions for the question-box. The hotel is opposite Union depot; rates have been reduced to $1.50 per day to those attending the convention. Programs can be had by addressing the secretary. Everybody, especially ladies, is invited to attend.
Mosiertown, Pa. GEO. SPITLER, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers Association will meet at the Court House in Charlotte, N. C., on Dec. 6, 1894, at 11 o'clock a.m. A full attendance is desired.
Steel Creek, N. C. A. L. BEACH, Sec.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

Eight Numbers for 10 Cents.—Yes, we will send the last eight numbers of the "American Bee Journal" for 1894, to any *new* name, for only 10 cents (stamps or silver). Now, here's a good chance to get some of your bee-keeping friends started in taking the "Bee Journal" regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have *three* bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the *last eight numbers of 1894*—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 578 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & Co., 128 Franklin St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. Co., 423 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & Co., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central ave.

Honey & Beeswax Market Quotations

CHICAGO, ILL., Sept. 17.—The honey market is quite active. We are getting good prices considering the hard times, owing to the reported scarcity of crop. We quote: Fancy white, 15c.; No. 1, 14c. Extracted, 6@7c. Beeswax, 25@26c. J. A. L.

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 6@7c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27@28c.
R. A. B & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

KANSAS CITY, Mo., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are quite as salable; and 2-pound sections are very little called for. We quote as follows: 1-pound fancy clover, 13@14c.; 2-pound, 12½@13c.; 1-pound white, 12@12½c.; 2-pound, 12c.; 1-pound fair, 10@11c.; 2-pound, 10@11c.; 1-pound buckwheat, 10@11c.; 2-pound, 9@10c. Extracted, clover and basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 50@60c. per gallon. Beeswax, scarce and in good demand at 29@30c. C. I. & B.

CINCINNATI, O., Nov. 8.—Demand is fair for extracted honey at 4@7c. There is a good demand for comb honey at 14@16c. for choice white.

Beeswax is in good demand at 22@27c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, Mo., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat, 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6¼c.; buckwheat, 5½@6c. Beeswax, 27@29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Nov. 21, 22—N. E. O. and N. W. Pa., at Corry, Pa. Geo. Spitler, Sec., Mosiertown, Pa.

Dec. 5.—Central California, at Hanford. J. F. Flory, Sec., Lemoore, Calif.

Dec. 6.—Carolina, at Charlotte, N. C. A. L. Beach, Sec., Steel Creek, N. C.

Dec. 18, 19—Northern Illinois, at Rockford, Ill. B. Kennedy, Sec., New Milford, Ill.

1895.

Jan. 9.—Indiana State, at Indianapolis, Ind. Walter S. Pouder, Pres., Indianapolis, Ind.

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Jan. 30, 31,—Vermont, at Middlebury, Vt. H. W. Scott, Sec., Barre, Vt.

Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.

——. ——.—North American, at Toronto, Can. Frank Benton, Sec., U. S. Dept. Agriculture, Washington, D. C.

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North American Bee-Keepers' Association

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VICE-PRES.—L. D. Stilson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson...Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill. 147 South Western Avenue.

Illinois Convention Reports.—The Illinois State Bee-Keepers' Association still have a good many copies of their Second Annual Report on hand, and no postage to send them out. Any one sending eight cents in stamps to pay postage and wrapping, will receive a copy of same by mail; or seven cents in stamps will pay for a copy of the First Annual Report, if any one desires it. Address, Jas. A. Stone, Sec., Bradfordton, Ill.

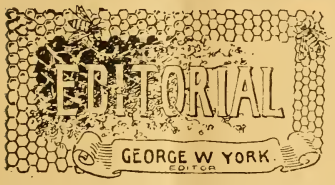
ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Sample Copy Free.

VOL. XXXIV. CHICAGO, ILL., NOV. 22, 1894. NO. 21.



The Convention Report.— Last week we explained that we had to omit the St. Joseph convention report, for the simple reason that Secretary Benton had not sent us any more "copy" after the part of the report that we had published in the "Bee Journal" for Nov. 8. We have the same excuse to offer this week—no "copy" was received from Secretary Benton in time for this number. We cannot account for the delay in forwarding the report to us, as at this writing (Nov. 16) we have not learned the cause.

We mention the foregoing, so that our readers may know that it is no fault of ours, that the report fails to appear regularly in the "Bee Journal." Next week, however, we will publish another installment, which came to-day.

The St. Joseph Convention was briefly written up for "Gleanings" by Mr. J. T. Calvert, Mr. Root's son-in-law and business manager. He wrote entirely from memory, and made a very interesting condensed report of the meeting. As he failed to mention it, we think he must have temporarily forgotten the "variety show," and the seal that was accused of saying, "Go out!"

A Year With Bees is the title of a Special Bulletin issued in October, 1894, by the Apiary Department of the Michigan State Agricultural College Experiment Station. It is written by Hon. R. L. Taylor, superintendent of the experiment apiary, and consists of the various monthly reports which have been published in the "Bee-Keepers' Review" the past year or so. It has 28 pages about the size of this page, and, like all that comes from the hand and brain of Mr. Taylor, is most excellent. There is no more careful, painstaking and accomplished bee-keeper in America to-day than Hon. R. L. Taylor, of Lapeer, Mich. He's "the right man in the right place"—and should be kept there as long as he will consent to stay.

Mr. J. W. Young, of Kingman, Kans., sends us a beautiful picture of his very neat apiary. We have never seen a cleaner looking bee-yard. It is indeed a model in neatness and arrangement.

Have You Honey to Sell?—If you have more than you can dispose of in your home market, why not advertise it for sale in the "American Bee Journal," and help out some other bee-keeper who may have had a short crop? Surely, those bee-keepers who have not enough to supply a good local trade already worked up, would much prefer to get honey from another bee-keeper than to get it elsewhere. Then, besides, there is in it the idea of helping each other.

Also, a better price would probably be obtained in this way, for your honey now on hand, as almost any one would prefer to buy from some one whom they could rely

upon, and thus be able to guarantee to their retail customers the honey they buy from a bee-keeper that they knew wouldn't sell anything but the straight article.

We believe that no bee-keeper, who has a local trade in honey, can afford to get out of honey at any time of the year, if he can at all purchase it from some one and be able to guarantee its purity. We know many bee-keepers whose honey we would as soon guarantee as if we had produced it in our own apiary. And why not?

We think that bee-keepers should help each other, and their industry in general, by aiding in evening up the honey crop as much as possible, and seeing to it that all their neighbors and friends everywhere have all the honey they want to eat.

The Illinois Convention met at Springfield, on Nov. 13 and 14. We learned from the daily newspapers on Nov. 15, that the following were elected as officers for the ensuing year:

President—J. T. Smith, of Lincoln.

Vice-Presidents—S. N. Black, of Clayton; George W. York, of Chicago; Mrs. L. Harrison, of Peoria; W. J. Finch, Jr., of Springfield; and James Poindexter, of Bloomington.

Secretary—James A. Stone, of Bradfordton.

Treasurer—Dr. C. C. Miller, of Marengo.

A code of rules or standards for judging honey at Fairs was adopted. The points are graded as follows on a scale of 100:

Quantity, 40; quality, 40; style of display 20, for comb honey. For extracted honey, quantity, 40; quality, 45; display, 15.

The Executive Committee of the association was constituted a committee on legislation to secure the passage of laws to prevent adulteration of honey and the sale of bogus articles as honey.

We expect, of course, to publish a full report of the proceedings shortly.

What About Next Year?—During the winter months is a grand time to plan for the following honey season. Most likely some of the old methods will be discarded next year, and the more modern and improved ones substituted. If you have discovered or proven any good methods that will help to make the production of honey more profitable, why not describe them in the "American Bee Journal" during the coming reading season of the year? An "even exchange" of ideas among bee-keepers would be "no robbery," and by so doing all would be greatly benefited.

Bee-keeping is quite unlike many other kinds of business. There is no necessity for secrets in the production of honey, while in some lines "the secret" is the principal part of the capital invested. By revealing what some bee-keeper may consider as his "secret," he may in return get a suggestion from another who had followed the same line a little further and succeeded infinitely better; thus the first bee-keeper's "secret" would be given in exchange for something which he probably would never have found out himself, and which may equal the difference between failure and success.

The winter season is the time to "trot out" and examine all the new "kinks" or improved old ones, and prepare for another year's campaign among the bees. What do you *know?* Or what would you *like* to know? Either question will serve as a good starting-point for you to write.

Mrs. A. C. Hill, of Moon Run, Pa., died on Oct. 14, leaving Bro. Hill with a little boy 7 years old, and twin babies. He writes with great tenderness, and a sorrowing heart, that they had "spent ten very happy years together," and that "life seems a burden now without her." Bro. Hill writes as one having the "blessed assurance" that in some sunnier clime they'll meet again, never more to be separated. What great consolation in so sad bereavement comes from such a trust! Our heartfelt sympathy goes out to the sorrow-stricken father and his three dear little ones.

Sample Copies of the "American Bee Journal" will be mailed free to all who ask for them. The next three or four months will be just the time for getting new subscribers, and if any of our friends can use sample copies among their bee-keeping neighbors, in order to get them as new subscribers, we will be glad to mail the samples, if the names and addresses are sent to us. Better educated bee-keepers will mean better things for all.

Old Bee Journals.—We have quite a number of old copies of the "American Bee Journal," extending back perphaps 10 years. We will send these out at *one cent a copy*, all to be different dates, and back of Jan. 1, 1894. Remember they are *odd* numbers, and you must let us select them. We cannot furnish them in regular order, that is, one or two months' numbers without a break, but will mail you as many single or odd copies as you may wish, upon receipt of the number of cents you want to invest in them. They will be fine reading for the long winter evenings, and many a single copy is worth a whole years' subscription. Better send for ten or more copies, as a sample order. Only a cent a copy, *back* of Jan. 1, 1894.

Paralysis Called Gastralgia.—In a recent issue of the "Farmers' Voice," we find the following learned (?) diagnosis of what bee-keepers have come to call "bee-paralysis:"

GASTRALGIA IN BEES.

While reading the "Farmers' Voice" of Sept. 29, I saw an article published therein written by a correspondent to the "American Bee Journal," giving his ideas as a diagnosis of bee-paralysis, which is without foundation. So far as I can ascertain from the symptoms he has given while explaining the disease in his bees, they are suffering from gastralgia, caused by unhealthy locations and unclean hives. Bee-hives, as well as horse-stables, need attention and the best of care. They should be kept clean and well odorized at all times. In order to do this, one should have a good supply of hives on hand ready for use at a moment's notice, should they be needed, so that the same hives vacated by the swarms this year are not needed to be put into use right away. Instead, they should be left to stand filled with the best of unslacked lime for several months, after which they should be well cleansed with good strong lye, and put into shape for habitation. Then put them in a good dry place until needed again the next season.

Gastralgia in bees is caused by a gas germinated from an unclean condition of the hives, together with allowing them to stand on low-lands where dampness is confined. In the above case the hives become filled with fermentation, although too light to be detected by the keeper without the proper means prepared for that purpose, yet enough to work upon the newly made honey creating a gas of a poisonous nature which rises among the bees while they are at work, stupifying them and finally resulting in destroying the whole apiary of bees.

Some persons have asked if it becomes contagious, and if the disease will convey itself to healthy apiaries, infesting them with the same, and whether or not the bees will undergo the same changes accordingly with the changes of breeding and weather. I will answer yes. Nothing but getting rid of all your old bees and hives and starting anew upon a different location of ground and adopting the rules given in this article will ever give you success in raising bees.

W. F. HAINES.

This article, taken from an agricultural paper, will be of interest (?) to the readers of the "American Bee Journal." While there has been much anxiety among the bee-papers to know what to do with bee-paralysis, the matter is now entirely settled! And there was no necessity for a personal investigation. All that was necessary was to hear the symptoms. Bee-paralysis is nothing more or less than gastralgia, and that is caused by a gas that is "germinated."

Unfortunately, there's no cure short of "getting rid of all your old bees and hives, and starting anew upon a different location of ground." Particulars are not given as to the method of "getting rid." But if your bees have bee-paralysis, or rather gastralgia, you must clean out your whole apiary in some way, either by selling to your neighbor or burning up the whole business. Otherwise "the hives become filled with fermentation," "enough to work upon the newly made honey," "finally resulting in destroying the whole apiary." Then after you've got rid of all the old outfit, buy new, and set on new ground. Uncertainty prevails as to where the "new location of ground" shall be, whether several rods away from the old location, or on new ground between the places where the old hives stood.

To prevent the inroads of this scourge, as soon as a colony swarms, the hive from which it issued must be "odorized" by filling it full of unslacked lime. Just what is to be done with the bees and combs that remained in the hive, is not stated. At any rate, fill it with lime, and if the bees don't like it, they can get out of the way!

Isn't here a hint for Dr. Peiro? If a human subject is suffering with gastralgia, fill him up with the best of unslacked lime for several months, and then clean him out with good strong lye!

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

The Five-Banded Bees.—Mr. G. M. Doolittle, in "Gleanings" for Nov. 1, answers this question:

Can a 5-banded queen be bred, or a queen whose bees are 5-banded, from pure Italian queens?

In reply to this, Mr. Doolittle says:

I unhesitatingly answer no, for the simple reason that there is no such a thing as a *pure* Italian bee or queen, when viewed in the sense of a pure race or variety, as the German or black bee is pure. At best, the Italian bee is only a thoroughbred; and that these 5-banded bees have been produced from what was originally only 3-banded leather-colored bees is a good proof that the above assertion is correct.

Perhaps it may be well for me to give right here a bit of history, which I have hesitated for a long time about giving, as I never wish to have a seeming desire to take away the laurels from any one. The history is this:

In the early seventies, H. A. King, then of Nevada, Ohio, and Jos. M. Brooks, of Columbus, Ind., were breeding for yellower bees than the average importations of Italians showed. In 1872 I procured some of Mr. King's stock, and continued to improve them until near the eighties, the apicultural world having lost sight of Mr. King meanwhile. At that time, by exchange, I procured queens of Mr. Brooks, and afterward, by purchase, got the last of his very best stock, he going out of the business. In the early eighties I sold one of the very best queens I could rear along the yellow line, to L. L. Hearn, of Oakvale, W. Va., and he and myself have been breeding and exchanging "blood" more or less ever since. So far as I am aware, all of the so-called 5-banded bees, of Italian origin, which are in the world to-day, came directly or indirectly from either Mr. Hearn or myself.

Mr. Swinson, of North Carolina, produced 5-banded bees, but did so by a promiscuous crossing of Cyprian, Syrian, Italian, etc.; but in the King-Brooks-Hearn-Doolittle bees the Italian side has been strictly adhered to.

A New Singing-Class Book.—The old Music Publishing house of Chicago, S. W. Straub & Co., has just issued a new work for Singing Classes, Day Schools, Conventions, etc. It is called "Straub's New Model," and contains a good elementary department and a vast amount of Sacred and Secular Music of fine quality and in great variety. Mr. Straub has made thirty popular books. This the latest, and is contains the elements of usefulness and popularity in a marked degree. 192 pages. Price, 60 cents. One Sample Copy for examination, only 30 cents.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

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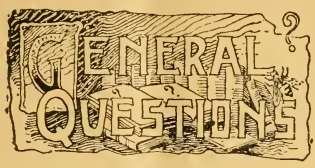
National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill. 147 South Western Avenue.

Those New Subscribers, that you have long been thinking of getting, are very likely ready now to give you their names. You know that besides "throwing in" the numbers for the rest of this year to new subscribers for 1895, we also give each one of them a free copy of the 160-page book, "Bees and Honey." Yes, and we will give you a premium for getting the new subscribers, as you will see on page 667. Better at once "get after" those bee-keeping friends of yours, and secure their subscriptions, so you can send it with your own renewal before the end of December. To double the present list of readers of the "American Bee Journal" will mean more than a doubly better paper for all. We can guarantee that. If each subscriber sends only one new name, the thing will be done. Will YOU do it?



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Crimson Clover as a Honey-Plant.

I do not see anything in the bee-papers about crimson clover as a honey-plant. I shall be pleased to write you about it if you desire. It will grow in Illinois. We in Delaware think there is nothing like it. J. C. S.

Willow Grove, Del.

ANSWER.—By all means, tell us all about the crimson, or, as it is also called, scarlet or Italian clover. You say it will grow in Illinois. Yes, anything that grows in Delaware will grow in southern Illinois, I suppose; but I am quite anxious to know whether it will grow in the extreme northern part of the State.

Removing Surplus Honey Late.

I have 5 colonies of bees that I neglected taking the supers from. The cold weather is now upon us. Would the disturbance caused by taking them off now, injure the bees? In the 5 supers there are about 30 one-pound sections sealed over, and the balance in more or less unfinished condition. Would it not be best just to leave them as they are until spring?

In the five years that I have handled bees, I have never lost a colony. I have always wintered them on the summer stands, leaving the supers on if they contain no honey, removing the emameled cloth and putting in its place a piece of burlap.

The honey crop here is rather short. I got 700 pounds from 21 colonies, spring count, and increased to 28. From what little experience I have had, the 10-frame hive suits this locality best.

Brookwood, Va., Nov. 6. F. F. B.

ANSWER.—So far as the bees are concerned, it would probably be best to leave them as they are. Still, if you care much to get the honey away, it can be done with little or no harm. There will undoubtedly be occasional days when bees will fly, and if a warm day comes you can take off the sections, doing it early enough in the day so the bees can fly afterward on the same day.

Granulating of Extracted Honey.

Does honey often candy in two or three weeks after being extracted? I had about 100 pounds of extracted honey this fall, which can now be cut with a knife. It was extracted about two weeks ago, having been gathered from ironweed. It is a beautiful amber color.

Brookewood, Va., Nov. 6.

ANSWER.—There is a great difference about honey granulating, but I think yours is quite an unusual case.

Building Up and Uniting Colonies.

After I have hived a swarm on the old stand I wish to put a division-board in the hive of the old colony (that has been removed), and have two entrances; destroy all but two queen-cells, let those queens remain until the fall flow, then remove one queen and let the colonies unite. Will they be apt to do it peaceably? And will not this plan give a strong colony for the fall flow, which is considerable here? J. S.

ANSWER. — I think all will work smoothly, and the uniting will be peaceable, especially if, after killing one of the queens, you allow a hole in the division-board for one or two bees to pass at a time, and then remove the division-board two or three days later.

Whether you'll gain anything by it, is another question. In my locality I'm sure there would be no gain, even if there were a heavy fall flow. You see when the old hive is moved to a new location all the field-bees will leave it, and

one queen can lay all the eggs the bees can take care of. If, in your locality, there is so long a time between swarming and the fall flow for the two colonies to be stronger when united than one single colony would have been, then the plan may be profitable.

If you choose to divide, there will be need to kill queen-cells. You put in the division-board—the bees will do the rest.

Making a Patented Article.

Is there any article patented in the United States that a person cannot make for his own use? W. H. R.
Woods, Oreg.

ANSWER.—A patent that will not allow an article to be made for sale by the thousand, equally prevents a single article to be made for the use of the maker.

Cow Pea Honey—Linden Honey.

I take the liberty of mailing you a sample of section honey-comb mashed in a bottle; it was gathered late in September and October from the stock or cow pea of the South—a small bean of many varieties of growth, mostly vining like pole-beans, planted here in the corn-fields. The beans are good fattening food for hogs, also a good forage plant cut for hay or ensilage. I cannot say if it will grow as far north as your place. I will send you seed next spring, or now, for spring planting, if you want to test them.

As to Mr. Muth's classing honey as dark except clover, mangrove and sage, my linden is as white as this I send you. Please sample it, and give your opinion on this pea-honey, as many readers of the "American Bee Journal" in the Southern States will be interested.

I am glad to see Bro. Theilman defend the pure linden honey, as it deserves, both North and South—as there is as good *white* linden comb honey produced in my apiary (in northeast Texas) as any of our markets demand.

The cow pea is a "Trifolium," or belongs to the clover families—with white, cream and purple blooms, much like English pea-blooms. G. W. B.
Bly, Tex., Oct. 31.

ANSWER.—The sample of honey sent, while not comparing with white clover, is beautiful in appearance and very light in color. Coming at the time it does, it seems to me it ought to be of great value. The cow pea has been known for years as a honey-plant, but not much has been said about it, perhaps not as much as it deserves. I've some doubt whether it flourishes in the North, but I would like to try it. A plant that pays to cultivate as a forage plant, and at the same time gives a yield of honey of as nice quality as the sample received, and at a time when bees have little or nothing else to work on, is certainly something to excite the interest of bee-keepers.

As to the color of linden honey, it seems to me the whitest honey I ever saw was granulated linden.

Italians are Preferred.

Are Italian bees best for Minnesota?

ANSWER.—I think the majority of bee-keepers in Minnesota, as well as in other States, prefer Italians.

Cellar Wintering of Bees.

Which is the best way to winter bees in the cellar? Is it a good way to remove the bottom-board and pile them on top of each other, with 8-inch space between each hive, with sealed covers? or leave the bottom-board on, and give top ventilation? My cellar is dark, and stays at about 38° in cold weather.
Hayward, Minn.

ANSWER.—Some like one way and some the other. I suppose the main thing is to let the bees have the right amount of change of air, without having too much of a current through the cluster. Perhaps it will generally be safer to use the first plan you mention, for in that way you can't go far wrong, whereas there is some danger, the other way, of having too little or too much through ventilation.

Dead Bees on the Combs.

I have 10 colonies of Italian bees, and they are well supplied with honey, and

very strong in bees. I examined them Nov. 1, and the bees had clustered in the front end of the hive on the inside, and between the combs at the rear end there were dead bees scattered and hanging all around on the combs. What causes this? There are quite a number of drones in the hives yet. I use the 8-frame dovetailed hive. MINNESOTA.

ANSWER.—It is not an unusual thing to find a few bees, sometimes quite a little cluster, dead outside of the main cluster. A cold spell had come on, the main body of bees hugged closer and closer together, and these outside bees, being perhaps sluggish from the cold, remained where they were and were chilled.

A Cheap Cover for Sections.

What is used to cover the sections on top of the supers so they will not get covered with propolis? I use section-holders.

ANSWER.—I doubt if there's anything better than a layer of air to cover the sections. That is, a space of a quarter of an inch between the tops of the sections and the cover, allowing nothing to touch the sections.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearing"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

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Read our great offer on page 668.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

That Beeville Bee-Meeting.

Friends, I wish to make a request of those that come to the Midwinter Bee-Meeting on Dec. 27 and 28. I wish you would come prepared, as nearly as you can, to give the number of colonies kept in your neighborhood, and the amount of honey, if possible, or as nearly as you can. This will be of great interest. It has been customary to formulate a programme of some kind, but we will leave the custom here, and we want each bee-keeper, during the first half day, or as soon as we meet, to present questions or subjects he or she wishes discussed or talked about. This will give all a chance to become interested, as a regular programme might leave out the very thing that you want to learn. This will be the programme, and of course we will have other interesting talks.

Those wishing to send articles of goods, implements, etc., that cannot attend, papers to be read, and such things, will receive our best attention.

I would be glad to see everybody bring along something to look at. If you have a new invention, or use a different smoker, hive, or what not, come prepared to lay its merits, as well as its demerits, before the convention. This is the way we learn. No one person ever does anything very great without the help of some one else, so I just *know* that each one of us can learn from the rest. So come along, prepared to talk, and I will insure you a nice time.

We have lots of good people here, so don't be afraid there will be no room for you, as we could entertain 500 or more persons at our town and hardly know we had anybody, as far as room is concerned.

I want every bee-keeper that comes to feel at home, and feel that it will be *your* bee-meeting, as it is not sectarian at all, and as bee-keepers are all invited, large and small, great and tall. So

come one, come all; and if you are not a bee-keeper, you will wish you were by the time the meeting is over.

JENNIE ATCHLEY.

Bunch of Comments and Suggestions.

Our weather is fine at this writing (Nov. 6). We are having one pretty, sunshiny day after another, and just cool enough to be pleasant—60° at night, and 75° in the middle of the day.

MAILING QUEENS TO AUSTRALIA.

The last "Australian Bee-Buletin" has reported our queens sent over as a failure, but they reported too soon for the main, big, *special* shipment, as we have had no chance to hear since the 85 queens started, both by express and by mail. I heard from Honolulu, and they *all* passed there in tiptop order, and that is about half way. I started another large shipment on Nov. 9, and I feel confident that they will go all right.

MIDWINTER BEE-MEETING.

Don't forget our midwinter bee-meeting, at Beeville, on Dec. 27 and 28. All are invited.

DRONE-LAYING QUEENS.

It was stated some time ago that I would be able to give something valuable on drone-laying queens, and the value of drones from such queens and from laying workers. After our hot July wind, we lost so heavily in bees that we had to use all the money we had to stock up again, and as it would cost me $50 or more to try the scheme, I had to postpone it, but have been investigating the matter eight miles from other bees, timber, or any residence, and I have almost made up my mind in the matter; but as there could not be a definite answer given, I suppose the matter rests about where it did. But I am never going to trust to drones from virgin queens, or from laying workers, and I may give to the public soon all my observations in regard to the matter. I think I can prove beyond a doubt that such drones are not good.

CHANGING FRAMES.

Did you all read Doolittle's article on page 566? If not, I would be glad if you *all* would read it three times. His words express my own sentiments to a "t." Just think of the great cost to the bee-keeping world—much less the labor and time—to change frames. Doolittle has a ripe mind, and his judgment in such matters is a big thing for bee-keepers. He is a good criterion, or guide, for us all to go by.

QUESTION-BOX LESSON.

I thought before this that our question-box would have been opened in our lessons, but as the midwinter bee-meeting needs my attention just now, I will postpone the question-box for a short time. But as soon as the questions and answers are complete, we will publish them, and my intention is to have the box so complete that one can learn how to keep bees successfully by studying the questions, as every important thing that can be thought of pertaining to apiculture will be asked and answered in a short, plain manner, and in the most simple style, so that all may easily understand, even if no knowledge of bees is possessed by the reader.

ALFALFA IN TEXAS.

Some are asking if alfalfa clover will grow in Texas and the South. Yes, I think it will grow anywhere in the South unless there are some places too dry for it. But I am told when it first takes hold, that if water enough is given, in case it does not rain, it will get so deeply rooted that it will stand a long drouth, and come out all right. I have seen fine, thrifty alfalfa in north Texas, and I believe it will grow here.

If there is any bee-keeper in the south or southwest Texas, please let us know how it is doing, and oblige us.

THE RIGHT KIND OF REST.

One good sister wishes to know when I rest. If she means to sit still and recline, and do nothing, and take ease, I will say I do not rest except when I am asleep—from 10 p.m. to 5 a.m. Being idle is no rest for me. I take rest when I get in the buggy and ride to town for the mail two miles away, or when I feed my chickens, pigs, etc. This is all rest to me.

Our rule is this: After the day's work is done, and we have done all we could well do for that day, we kneel around our family altar and thank God for his many blessings, and then lie down and sleep soundly. We never lie awake at night, worrying a tired brain over something we cannot help, which is sure to make us feel stupid the next morning.

Please excuse me for taking up your time with these stray remarks, but while my mind caught these things, I felt sure that some one would read this that

would worry and fret at night about some trifling matter they could not help—just like I used to do—and it is wrong. We should do all the good we can during the day, and at night pillow our heads upon the God that made us, and let the cares of the world go by. This is genuine rest, and the *best* tonic for the mind and body; and, I believe, would be the means of prolonging our days to a certain extent. JENNIE ATCHLEY.

One Who Expects to "Get There."

MRS. ATCHLEY:—Noticing your request in the "American Bee Journal," that all should notify you who intend attending your "midwinter bee-convention," I will hereby say that I anticipate going, if nothing prevents. I have a very nice little apiary of 105 colonies, and am very much interested in the bee-business. I have been very successful so far with them. I have one colony from which I have extracted 172 pounds, and another from which I have taken 7 supers, each containing 24 pounds, this year. I read your department in the "American Bee Journal" with great interest. I wish to congratulate you upon your success in getting up the midwinter convention.

F. J. R. DAVENPORT.

Nash, Tex., Nov. 6.

Friend D., I am glad you are coming, and we shall be pleased to have you represent good old Ellis county. We will put your name on the roll, and if you are not here, *we* will feel disappointed. We are going to have a large attendance, judging from present prospects. You have done well, this year, with your bees. JENNIE ATCHLEY.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Lung Fever.

Whew! this cold, drizzling night, as I sit in my cozy library, reminds me of the possibility of some poor unfortunate caught out late on his way home. He drives his weary team along in this cold rain, with a wind that almost blows the icy water through his very clothes, chilling the marrow of his bones! How often I have experienced this hard lot! Poor man; he finally arrives at his barn-door so benumbed he can scarcely crawl down from the seat of his road-wagon. At the cry of "whoa!" to his team, his good wife is apprised of the husband's return, and with shawl over her head and shoulders, runs out to assist in bringing in the things from town. To her surprise she learns her man is hardly able to get off his wagon, so shaky and stiff is he! But a little encouragement finally gets him into the house, but, though hungry, he is so dizzy and "done out," that he goes to bed instead of supper.

Before day he feels sore, "achy" and feverish. His mouth is parched, throat feels full, his temples throb, and breathing is not only difficult, but painful. Towards noon a high fever has set in, a troublesome cough harrasses the patient, and the next day, having found the usual means for his relief unavailable, sends for the doctor. This faithful friend comes quickly, and soon is able to determine by the color of brick-dust expectorations, and other symptoms, that lung fever has set in in earnest, and necessary remedies are given to rid the sufferer of the pain in his sides, reduce the fever if happily the disease may be so modified that a short illness only may result, and thus save him a faithful, invaluable member of his family—a devoted father to his children.

It is in this unavoidable manner that the most serious afflictions are contracted—and it is just at such times that practical knowledge how to overcome the disasters that threaten us is of vast importance to our well-being.

The first step to take under such circumstances, then, is to at once take a full bath in water as warm as can be borne, that the circulation of the general system may be equalized; afterward, jump into a *warm* bed—not one with cold sheets, to set the patient into another chill. A heaping tablespoonful of salts, given in hot water (sweetened, if preferred), should be given, and prescribed doses of No. 1 out of the "Bee Journal" Remedy Case every ten minutes, until the skin becomes warm and moist, and the pulse less full. Then substitute No. 4 every half hour, while awake, not disturbing the patient to give anything when asleep.

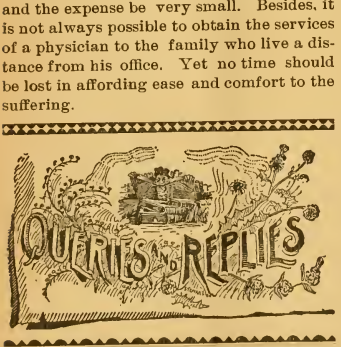
His drink should be sweetened hot water or weak tea, and the diet milk, beef broth,

rice-pudding, soft yolk of eggs, and baked apples, if desired.

Never forget the importance of keeping the patient *warm*, and free from all drafts of air. If the lungs are very painful—especially on taking a long breath—a mustard poultice may be applied, or a leaf of horse-radish kept over the pain, as suggested in a previous article, until it smarts pretty well; but under no circumstance should either be permitted to stay on long enough to blister. If in a few days the cough becomes very troublesome, give Remedy No. 13 in a teaspoonful of honey, a dose every two hours.

Every household should possess a few reliable remedies and book of instructions to use in just such emergency. It often enables them to cut short diseases that, left to develop, may prove very serious, and the treatment expensive.

The above suggestions as to treatment, judiciously followed, will, in the great majority of such cases, result most happily, and the expense be very small. Besides, it is not always possible to obtain the services of a physician to the family who live a distance from his office. Yet no time should be lost in affording ease and comfort to the suffering.



Giving Water to Bees in the Cellar.

Query 949.—Is it desirable to give bees water while in the cellar?—Idaho.

No.—B. TAYLOR.

No.—P. H. ELWOOD.

I think not.—M. MAHIN.

I think not.—E. FRANCE.

No, never.—R. L. TAYLOR.

I think not.—J. M. HAMBAUGH.

Not with me.—G. M. DOOLITTLE.

I doubt if it is for my bees. I never could get them to take it.—C. C. MILLER.

No, not by any means.—DADANT & SON.

I do not think it necessary.—EUGENE SECOR.

I don't think it is necessary.—J. P. H. BROWN.

I do not know. I never tried it.—J. A. GREEN.

No. They do not seem to need it.—C. H. DIBBERN.

My experiments have not demonstrated that it is.—S. I. FREEBORN.

I don't know, as I never have had any experience with cellar-wintering.—W. G. LARRABEE.

I do not think so. I tried it one year, and it resulted disastrously—or I thought it did.—A. J. COOK.

I have always been very successful, and never water them while in the cellar.—JAS. A. STONE.

I have never practiced cellar-wintering, but I should hardly deem it necessary.—W. M. BARNUM.

I don't know, but I would give the bees a little water that *have* to be confined long.—MRS. JENNIE ATCHLEY.

Occasionally, when they have been noisy, water was given to them, and they quieted down.—MRS. L. HARRISON.

I do not put them into the cellar, as a general thing. If I did, I should not give them any water.—EMERSON T. ABBOTT.

I have always wintered bees on the summer stands, so I can't say, but I can see no reason why it should be done.—J. E. POND.

No; I have given them water in winter, but without apparent benefit. If they become very restless, they need a flight.—G. L. TINKER.

Not if they are quiet, but balls of snow at each entrance will sometimes quiet them when they are very restless.—MRS. J. N. HEATER.

I don't know. But from my observation of bees wintered in the yard, I should think that bees have but little use for water until they begin to rear brood.—G. W. DEMAREE.

As a general thing, no. I have seen cases where they were uneasy, and I gave a sponge saturated with water, and they became quiet. I have had them do the same without giving water.—H. D. CUTTING.

Have You Read the wonderful Premium offers on page 667?

MAILING QUEEN-BEES TO AUSTRALIA.

BY C. MANSFIELD.

Some time ago I wrote a few lines on the subject of mailing queens long distances. Since then I have been able to gather another grain or two of information on the subject, which may be acceptable to some.

In the great majority of cases the queens lately shipped from America to Australia arrive dead. In fact, a safe arrival now is such a *rara avis* as to call forth a lengthy report in a recent issue of "Gleanings." One Australian breeder recently received a queen from America in the usual condition—mummified—and being of an inquisitive turn of mind, shook out the dead bees, and put in a queen and attendants of his own. The candy was not consumed. The result was that every bee in the cage was dead in three days. How was that? Since then I have examined the candy—almost untouched by the bees—in several cages sent here by Mrs. Jennie Atchley, your Texan prodigy. In every case the bees were as dead as the proverbial "door nail."

Not to be foiled, some importers here decided to get the queens out in nuclei, and when they arrived it was the same sad story—all dead!

Now, why is this, I again ask? Of course it is only breeders who are so anxious about importations from foreign countries, especially from America, where by crossing and selection, and probably by the infusion of new blood from abroad—India, to-wit, or Asia Minor—a very yellow strain of bees has been evolved. And it is this strain Australian breeders are anxious to obtain in its greatest perfection. The leading breeders in this country are regular importers from various breeders in Italy. They come in three-frame nuclei about six inches square, ventilated, and each furnished with two small flat vessels of galvanized iron hanging at the sides with covered mouths hanging downwards. We find here, as you have found in America, that for all the best qualities of a bee these Ligurians cannot be excelled. But Australians in this sunny land, are very æsthetic, and demand the beautiful, even at some sacrifice of the useful. And so we must have the "five-banded beauties." But how?

I have one or two suggestions to make. First, regarding the candy, and to bear out what I say, I will here cite an experience. A friend of mine received two queens a week ago—one from Mrs. Atchley, and one from Mr. Doolittle. Mrs. Atchley's came direct, and Mr. Doolittle's made a call at New Zealand, to be refreshed, and then sent on the other four or five days' sail. Mrs. Atchley's was sent in a cage made of pine, and from various indications, the very slight consumption of honey, and the dry, shrivelled condition of the bees, etc., one would readily conclude that they were coffined and ready for interment before reaching San Fran-

cisco. Doolittle's—and here allow me to digress to say that the general "get up" of his cage bore the stamp of the "bee-master" in every detail—were sent in a cage made, I think, of basswood; and his queen reached New Zealand alive only four days from her future home, and there succumbed under manipulation.

In nearly every case the candy remaining in the cages tasted quite strongly of the turpentine from the pine—sufficient, when taken with every mouthful of food, to place the poor creatures beyond the power of medical skill.

I have arranged with a friend now residing in the Sandwich Islands, to receive for me 32 queens ordered from American breeders. On arrival there he will remove the wood cover, place the cages wire-cloth downwards over his colonies, and place a half super over them; and so let them remain until the departure of the next mail. It would be well to cage the queen in the hive during the time these cages were on top. He will then turn the covers, and re-address to me.

Another plan I intend to try if the foregoing fails, is this: I shall arrange with Mr. Doolittle for one of his nine-frame hives to be fitted up with half a dozen one-pound sections in each of the two end-frames, or end but one, each section to contain one queen and a few bees, covered on each side by wire-cloth. One queen to be placed in the body of the hive, too. A flat vessel with a sponge stopper at the bottom, and a funnel mouth protruding could be filled once a week say, and the whole parcel could be sent by steamer from San Francisco or Vancouver. I think a number of queens, in this way, would come all right, if simply caged among the bees of the hive.

The chief desiderata in mailing queens successfully are good—not necessarily "Good"—candy, made from pure powdered—not confectioners'—sugar and honey, of the proper consistency, plenty ventilation, few bees (10 or 12, say), and above all wax the inside of the receptacle for the candy. Under these conditions queens should go safely a journey of 14 to 21 days. Beyond that time the proceeding is at present problematical.

A discussion on these points would be very interesting to breeders on both sides of the water, and would fit in well during your approaching inactive season.

Largs, N. S. W., Australia, Sept. 1.

HIVES FOR WINTERING BEES, ETC.

BY E. S. LOVESY.

As usual, at this time of the year, we have considerable agitation on the question of wintering bees, and many theories are advanced. Some think that a large hive is the best, others think that there is less space to keep warm, and thus they will do better in a small hive. My experience is, that the size or style of hive cuts little or no figure. Bee-keepers can, and do, cover up their bees and shut off all ventilation, and thus smother them in all sizes and kinds of hives.

Protection is good, but the bees must be kept dry, and it is impossible to keep them dry without ventilation. They will often stand much cold if they are not kept in a damp condition. I heard of two hives of bees that were knocked over by stock, and they lay on their side all winter, with the wind blowing through the hives, and the bees came out in the spring all right, while others near by, that were covered up closely, died through dampness.

I would recommend J. S. Scott's method as published on pages 474 of the "American Bee Journal." He has been very successful both in wintering and in obtaining profitable returns from his bees. He uses the 8-frame Langstroth hive.

For an all-purpose hive, it has many admirers in Utah. As a non-swarming hive, I have always been successful with the 8 and 10 frame Langstroth.

I have put up my bees for the winter on Mr. Scott's plan, using two-story hives instead of supers. I have placed strips of wood across the frames, giving the bees free passage over them, then laid a strip of burlap and also a sheet of screen-door wire between the two boxes to keep the mice out. I have filled the top boxes full of chaff, removing the covers entirely and placing a gable-shaped roof over each row. I prepared a few colonies this way some years since, and I did not lose any of them. The chaff in the top, and the packing at the back, keeps them warm, and gives free ventilation, thus keeping them dry.

Salt Lake City, Utah, Nov. 7.

SECTION-HOLDER SLATS—ALFALFA.

BY E. S. MILES.

On page 524, Dr. Miller asks a question himself, as to whether section-holders sag or not. I have used these slats for three years, and while there has not been much in them the last two seasons to make them sag, I have had a few filled, and have never yet had one to sag. If the weight of the four sections was all on the middle, they would undoubtedly sag, but wedging in between the ends as they do, they cannot sag without smashing the sections together. Then the bees always glue the sections together before they store in them, so they would scarcely sag if there were no slats at all.

The section-holders in Root's dovetailed hive are made of seasoned basswood, and just allow a piece of wood separator stuff to wedge in at the ends. This wedging from the end and side, together with the slat bottoms, gives very little propolis on the sections, and is, I think, a very good surplus arrangement.

About Alfalfa.—I don't live in the alfalfa country, but I'm closer to it than is Dr. Miller, I think. I sowed a small strip along the roadside two years ago. It has done well, and is, so far as I know, all the alfalfa clover in this (Crawford) county. To describe it I would say it looks more like sweet clover, except the blossoms and seed-pods, than anything else I know of. The flowers are purple-colored, shaped about like sweet clover blossoms, but probably twice as large. They grow on stems similar to the sweet clover, but rather more in bunches. The seed-pods are funny little things, looking, at a little distance, something like a bunch of little brown worms curled up.

Alfalfa's forte is dry weather. Whether it will stand the wet seasons we frequently have here, remains to be seen. Sweet clover stands the drouth well. I sowed some last spring, and it came through the great drouth all right. It was a little short in some places, perhaps, but "all there." Denison, Iowa.

HONEY-DEW—CARNIOLAN BEES, ETC.

BY O. B. GRIFFIN.

I read with very much interest G. W. Demaree's article on pages 494, especially that part in reference to honey-dew. I think his suggestion to have reports from the different localities in which honey-dew has appeared, a good one. I have learned a little about it, and should like to learn more. I had my first experience with it this season, my few colonies storing about 25 pounds in the sections. The summer had been rather dry, and about Aug. 15 the bees commenced gathering it

from the leaves of the maple and beech trees, which were quite thickly spattered. It lasted only six or eight days, then suddenly ceased. It was quite dark in color, but after ripening, it was preferred by some to clover honey.

My bees stored a total of 300 pounds in the sections the past season—all, with the exception of honey-dew, being No. 1 honey. This was taken from 5 colonies, spring count, and I increased to 13; 65 pounds in one-pound sections was the largest yield from one colony.

There was no fall honey here, and late swarms need to be fed, if not already looked after. There are but few bee-keepers in this most northern county—the "garden of Maine"—and comb honey in one-pound sections brings a fair price—18 to 20 cents per pound.

After reading Jennie Atchley's article on page 525, I think I shall give the Carniolans a trial. One bee-keeper here, after giving the Italians and Carniolans a trial in the same yard, prefers the latter.

Mrs. Atchley speaks of the disposition of the blacks to run off to the woods as soon as possible after swarming. My bees I have supposed to be nearly, if not quite, full-blooded blacks, and they often hang for sometime in the apple-trees near which they are placed, and in one instance a swarm remained in the tree all night; when shaken down the next morning, they fairly tumbled over each other in their efforts to get inside their new home. Is it possible I may have a better strain of blacks? or is it more probale that have a little Italian blood in them? Perhaps the apple-trees so near them have something to do with it. I have never had a swarm go off to the woods.

The largest producer of honey in this locality is, I think, Mr. E. E. Tarr, whose crop, the past season, was about 7,500 pounds of comb honey in one-pound sections.

What a treat it would have been for us beginners in bee-keeping to have been at the St. Joseph convention! Caribou, Maine, Oct. 29.

SOMETHING FROM A BIG BEE-MAN.

BY C. DAVENPORT.

Bee-keeping is my only business—I have no side-lines of any kind—it is all bees with me. I have at present 367 colonies. During the spring, summer, and early fall they are located in three yards—one 6 and the other 13 miles from the home yard. For about six months I employ three men—one for each yard; the rest of the time I have one, and sometime two, and we all have all we want to do. This will make the sixth year I have put into winter quarters about 350 colonies.

WINTERING BEES.—My bees are all hauled home in the fall, and wintered in two cellars, built for this purpose. They are made somewhat like Mr. B. Taylor's, only larger, and not so complicated. There is a stove in each one, so they can be warmed if necessary. The cellars were built six years ago the past summer. My winter losses in them since has been from 4 to 13 per cent. I have bees enough so that I do not save any colonies for winter that are not strong and in good condition.

The honey in the brood-nests of two-thirds, and sometimes all, these colonies is extracted in the fall, and they are fed from 20 to 30 pounds (some colonies requiring more than others) of granulated sugar syrup for winter stores. Now this is not done because I think that sugar syrup is better than natural stores, because I do not. It is done for profit. I sell extracted honey at from 8 to 15 cents per pound, according to the kind it is. My crop of comb honey, this summer, was a little over 60 pounds per colony, spring count.

SUGAR SYRUP FOR FEEDING.—I want to say a few words about making sugar syrup. I know it is too late to benefit any one this year, but it may save some one lots of fussing next year. I have seen a good deal in the bee-papers this fall about the way to make it, but the way I have prepared it for a number of years is ahead of anything I have seen yet, I think, at least for feeding on a large scale. I have fed a good many barrels of sugar in the last six or seven years, and the way I have made it into syrup is this:

I simply take clean barrels that will hold water, and put in equal parts, by measure, of sugar and soft water. (Hard water will do—I have used it, but it is not as good.) Stir well together. If made in the morning, stir again at noon, and at night, and by the next morning most, if not quite, all of the sugar will be dissolved. If it is not, stir well occasionally until it is. I have found a difference in the time it takes granulated sugar of the same brand to dissolve. Of course in this way it can be made in as small a quantity as one may wish, by using a keg, can, pail, or anything else that will hold water.

Of course syrup made in this way is equal to, if not better (I think it is better) than that made by the percolator process, for flannel or cheese-cloth cannot do any good except to keep the water confined with the sugar until it is dissolved, and if it is so that it can get through at all, the first will not have much sugar with it. I think that is why the bees take hold of it so slowly when fed by inverted crocks or stuffed feeders. By the plan I have described, we can keep the sugar and water together until the sugar is all dissolved, and I think it is quicker and easier to carry the feed, already made, and pour it into a feeder, than it would be to bother with crocks, plates, cheese-cloth, etc.

I use a feeder constructed like the Miller feeder, only a little deeper, so I can feed all that I wish at one time. I think it was in the "Review," last fall, that I read an article written by Mr. R. L. Taylor, in which he said that feeding was the most trying of the apiarist's duties. I do not so regard it. I can make a lot of syrup, and feed a large number of colonies, without very much work—at least I have fed from 200 to 350 colonies their full rations every fall for six years. I have had help, but I could do it alone.

Sugar syrup made by this cold-water process is much better than that made by boiling, as that which is made by heat will crystallize, and the former will not—at least will not during the winter, as I have often examined colonies that had some of this syrup left in the spring, and found it in nicer condition than when fed in the fall.

A SUPER CLEARER.—I will now try to describe a board which I use for clearing the supers of bees. This board I made the first summer I commenced keeping bees—13 years ago—and have used it ever since, although I have tried nearly all of the different kinds of bee-escapes. I prefer the board to any of them. It costs about 4 cents for material, and 5 or 10 minutes' work to make one.

To make it, take a board the size of the top of the hive, and four pieces of lath, or any thin strips about ¼ inch thick, and nail a piece on each side and end of the board, so that the super will set on these strips. Cut a hole through the strip on the front of the board, so that one bee can go through very easily. When ready to remove a super, lift it up and place the board on top of the hive, with the hole cut in the strip in front, so that when the bees come out they will be on the outside of the hive in front.

Now, lest some may not understand this description, I will say that the board, when done, should be just like the bottom-board to the dovetailed hive, with a strip in front the same as at the back, and a small hole cut through the center of the

front strip, and the projections on the underside at each end cut off level with the board. Now there is nothing to stop bees from going back, and the bees from the brood-nest might come out and go into the super, but they don't do it. This board will clear a super, or supers, as quickly as any escape I ever tried. Robber bees might go in, some of you may think; so they might, but I have never had any trouble with them, and I have some bees that it would be very hard to excel as robbers. Supers should be removed the next day after the board is put on. There will not be any bees in the super the next morning.

Now, by the use of this board the bees are let out on the outside of the hive. I know some object to this plan, but I cannot see what the objection is, as the bees are all in plain sight of the entrance, and a bee just hatched would know enough to go in. I think it is better to use this board, or an escape of some kind, than to remove supers and bees to some place or room away from the yard, as then many young bees would be lost or killed in trying to enter other hives.

OTHER SUBJECTS.—Some time I may try to tell the kind and size of hive I use, how I control swarming, about the different kinds of bees I have, what I know about bees improving, and bees improving themselves when left alone; also what I think I know about bees degenerating under some of the most popular plans that are practiced at the present time for the suppression of swarming or increase.

Southern Minnesota, Nov. 3.

REASONING ANIMALS—THE HONEY-BEE.

BY ALLEN PRINGLE.

The question as to whether animals reason or not is a disputed one. For myself I am convinced that they do, and with more logic sometimes than some of the *genus homo*. The notion that what we observe as mind in animals is all instinct and no reason, ought to have taken its departure with the discovery that the animal had a brain and nervous system quite similar to that of man, and subject to the same mental and physiological laws. The truth is, man has both reason and instinct, and so has the animal. Instinct acts spontaneously without thought, while reason reflects and adapts means to ends. When we wink with lightning rapidity to protect the eye from something flying into it, or when we start back in fright from a sudden and threatened danger, we act instinctively; the animal does the same. On the other hand, when we act from reflection, and adapt means to ends, we exercise reason; the animal does the same thing. In our daily contact with our domesticated animals we find ample proof of this. I mention the horse, the cow, the dog, and the honey-bee, not because they are the only animals that reason, but because most people are specially interested in these domestic animals, and are familiar with their characters and habits. Many other animals exhibit a high degree of intelligence.

[After giving interesting illustrations of reasoning powers being possessed by the cow, the horse and the dog, Mr. Pringle has this to say about the honey-bee:—EDITOR.]

We now come to the honey-bee—last in the list, and the smallest, but by no means the least. Insignificant in size as she is, the honey-bee can put any or all of these other big animals to flight in very short metre! In her marvelous powers of delicate mechanism she can also distance them all, and even cast us "in the shade." Hers is one of the fine arts in animal mechanics. As diminutive as she is, she, too, has a brain and nervous system, with ganglions similar to those of the human brain,

and with nervous tissue equal to ours in proportion to weight. We need, not, therefore, so much wonder that this industrious little insect thinks and reasons, and lays out her work with mathematical accuracy, exercising that exquisitely fine little brain with such extraordinary results. After watching, admiring, handling, and studying the honey-bee for thirty years, no one need tell me that this wonderful little creature is void of reason and intelligence, and is guided solely by what is called instinct. She, of course, acts much from instinct, as that word is popularly understood, the same as the higher animal does. But new conditions and exigencies arise in which there has been no experience, and where there is, therefore, no instinct adequate to guide. It is then we see unmistakably the exercise of reason in the bee to adapt herself to the new environment.

But the honey-bee, like human beings with reason, makes mistakes; and, indeed, these very occasional mistakes furnish evidence of my contention, for, if the bee were solely guided by an "unerring instinct," she would make no mistakes. Allow me to note here one or two of her natural blunders. A colony of bees left to themselves will, for instance, swarm themselves to death—that is, they will cast so many swarms in the one season that the parent colony is left so weak that it dies in the winter; and the last two swarms cast (say of four altogether) are also so weak and late as to be unable to gather enough stores for winter, and they, too, perish. This, of course, is a great mistake; for, did they swarm but once or twice, all would be strong and in good condition to face the winter. This mistake they make in a state of nature, in a hollow tree in the woods, as well as in the model hive of modern bee-keeping.

I once had a colony which, in the latter part of winter, being dissatisfied with its queen, began to rear young queens to supersede the old one long before there was any prospect or possibility of having drones to mate with the young queen. This certainly was a mistake, as it meant the depopulation and extinction of the colony; whereas the old queen could have carried them safely through to the proper time to supersede her. I may say here, by way of explanation, that when a colony of bees finds its queen failing in fecundity, from age or other causes, the workers, foreseeing a gradual depopulation of the hive, set about warding off the impending ill by superseding their mother and queen—that is, by rearing a young queen to take her place. In the case just noted the *object* was all right, and the *means* to attain it all right, but, like ourselves sometimes, they were doing their work at the *wrong time.*

A normal colony of bees consists of one queen, some drones—more or less—and from 30,000 to 50,000 workers. The queen is the mother of the whole family—of the workers, the drones, and even her rivals, the young queens, which are to take her place in the hive, and they sometimes dispatch her in superseding her. The workers, as their name implies, do all the work of gathering honey, rearing brood, etc. The drones, like the drones in the human hive, do next to nothing, but do it well, with this difference, that the human drone fails to do well what little he does do.

The conclusion I have reached is this: the horse, the cow, the dog, the honey-bee, and other animals have a certain degree of reason and intelligence as well as instinct, and also have, some of them, strong social and domestic feelings, and are therefore entitled to greater consideration and kinder treatment at the hands of man than they sometimes get. I have also come to the conclusion, viewing the multitude of mistakes and follies of the higher animal, man, that his superior reason and more exalted faculties are not on the whole turned to as good account as the inferior reason and faculties of the so-called "brute beasts."—Popular Science Monthly.

Selby, Ont.

MATRIMONY-VINE—A CORRECTION.

BY FRANK BENTON.

On page 522, Mr. A. J. Duncan has a note on a honey-producing plant which is known in his locality (Hartford, Iowa,) as "Washington willow." The specimen Mr. Duncan sent was forwarded to Prof. T. J. Burrill, of the University of Illinois, for determination, and the latter says, on the same page of the "American Bee Journal:" "This is matrimony-vine, *Solanum jasaminoides*.....The shrub is very hardy, succeeds everywhere in our country, but I do not know that it has been recommended as a honey-plant, neither do I know anything about the value of the shrub as a honey-producer."

It seems to me that Prof. Burrill has made a mistake, either by inadvertently giving the wrong scientific name to matrimony-vine, or else the plant Mr. Duncan sent in is not matrimony-vine at all. *Solanum jasaminoides* is a tall, woody-stemmed house-plant climbing by its petioles; stem not at all prickly, but quite smooth thoughout; leaves entire, oblong-ovate or somewhat heart-shaped, occasionally divided into three leaflets; flowers in clusters, white or bluish. It comes from Brazil, and as indicated above, is not hardy with us. In contradistinction to this matrimony-vine, bearing the scientific name *Lycium vulgare*, comes to us from northern Mediterranean coasts, and is hardy wherever introduced in the United States, having even run wild in many places north; the stem is lithe, somewhat thorny, long, with numerous recurved branches; leaves, oblong-spatulate; flowers, appearing all the season until late in the fall, in clusters of two or three in the axils of the leaves, pale greenish-purple, the spreading corolla five-cleft; fruit a bright red berry.

Prof. Burrill was not aware that matrimony-vine had been recommended as a honey-producing plant, yet for several years it has been included in the list of honey-plants given in the "A B C of Bee-Culture" by A. I. Root. I have myself observed that bees frequent its blossoms from spring until late fall, even during great drouths, and they work on them as late in the day as they can possibly see, gathering both honey and pollen. I mentioned this in my recent essay at the North American convention in St. Joseph, Mo., and recommended the plant highly both for ornament and honey and pollen. Dr Peiro afterward called attention to the fact that the plant was to be found growing wild within the city—near the Court House, and several members went there and secured roots to take home with them.

Washington, D. C., Oct. 30.

Eight Numbers for 10 Cents.—Yes, we will send the last eight numbers of the "American Bee Journal" for 1894, to any *new* name, for only 10 cents (stamps or silver). Now, here's a good chance to get some of your bee-keeping friends started in taking the "Bee Journal" regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have *three* bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the *last eight numbers of 1894*—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 667 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 672 for advertising offer.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Managing a Laying Worker.

First raise the brood-chamber and put a hive with some brood and honey in it; put wire-cloth between the two hives. Place a wire cone in the top story so the bees can go out, and not get back, but they will go into the bottom story. When most of the bees are out of the top, you can cover over the wire-cloth, and place a queen in the bottom story. in a little while there will be only a few bees in the top story with the laying worker, which can be destroyed.

Lucan, Ont. HERBERT GIBSON.

Very Poor Year for Bees.

This has been the poorest year we have had—only 400 pounds of honey from 80 colonies, and no increase. We had just 2 swarms to issue—one went back, and I cut out the queen-cells; and the other I returned, so we stand just where we were last spring, only the hives are very heavy. I never had bees in better condition at this time of the year. I have not put them into the cellar yet, but shall do so soon, as it is getting cold. J. A. PEARCE.

Grand Rapids, Mich., Nov. 12.

Hives Facing South in Winter.

In wintering bees in dovetailed hives, on their summer stands, I find that they winter best with the hives facing the south. The reason is that bees in the winter, as a rule, cluster to the sunny side of the hive, and if there is nothing in the way, they will leave their combs and cluster on the wall of the hive, and while so clustered, if a cold snap comes they perish by freezing. Those that thus perish will fall down and be carried out, and others will take their place to perish in their turn. This process goes on all winter, or until the colony succumbs, and if the colony survives the winter it is at the expense of being greatly depleted in numbers. If the hives face the south, not so much surface is exposed to the sun, and the end-bars of the frames serve, to some extent, as barriers to prevent the bees from clustering on the walls of the hive, and the liability to perish by freezing is greatly lessened.

Some years ago we were advised in the bee-books that if we had but one division-board to the colony, that in preparing our bees for winter, we should put it on the north side of the cluster; but experience teaches that the board should be put on the south side of the cluster. This experience has been a pretty dear one to me, but we all profit by our mistakes, and I may yet be the better off by having tried wintering several colonies of my bees with division-boards on the south side of the cluster.

My honey yield this year was an average of 61 pounds per colony, spring count. This is not a poor crop for an "off year." H. F. COLEMAN.

Sneedville, Tenn., Nov. 1.

Honey vs. Royal Jelly.

Joseph Shatters, of this place, has been very successful in using honey in the place of royal jelly in queen-cups, *a la* Doolittle, but made almost an entire failure when he used jelly. He uses quite thick honey so it will not run down in the cups, and but little of it. I tried this method a little late in the season, and got only a few of the cups worked. Probably the bees were not in condition to do better. I. W. BECKWITH.

Ft. Lupton, Colo.

Report for 1894, Etc.

In the fall of 1893 I put into winter quarters 55 colonies of bees and 49 came through considerably reduced in numbers, caused by late packing. I increased to 54, and obtained a little over 3000 pounds of honey, mostly extracted. I have met a good many bee-keepers this fall, and they generally report a small crop. We were dried up here for two or three months.

I have sold about 2,500 pounds of my honey, all in the home market, at 10 and 11 cents for extracted, and 10 to 15 cents for comb honey.

I took the 1st premium for display of comb and extracted honey at our County Fair the last four years. I exhibited

honey at the Pennsylvania State Fair. A Mr. Dewey, of Columbus, Pa., and myself, were the main exhibitors. We were overlooked by the committee on honey (as were many other exhibitors), and received nothing for our pains, although our exhibits were fine. Mr. Dewey exhibited honey, bees, hives and bee-literature. He had a folding hive (of his own invention), filled with bees, with feeder attached, so that the bees were storing honey and building comb while on exhibition. They drew the attention of hundreds of people.

I have been taking the "American Bee Journal" and keeping bees for about 15 years, commencing when 15 years old. It seems to me that the "Bee Journal" grows better every year. I learn something new out of nearly every issue.

E. W. PECK.

Richmond Center, Ohio, Nov. 12.

What Are Golden Italians?

There seems to be quite a difference of opinion as to whether Golden Italians are a pure race or not. This question was asked in a certain bee-paper some time ago: "What are Golden Italians?" I have not seen a satisfactory answer yet.

Being greatly interested in the "Golden beauties," I, for one, am sorry to confess to the truth, that they are *not* bred from pure "Italians," but are Italian or Cyprian, crossed with Carniolans. The second cross will bring the "Golden Queens," and the so-called five-banded workers.

I here propose a more correct, or what is an honest name for them, viz.: "The Golden Carniolan Cross," or "The American Golden." R. A MARRISON.

Inverary, Ont.

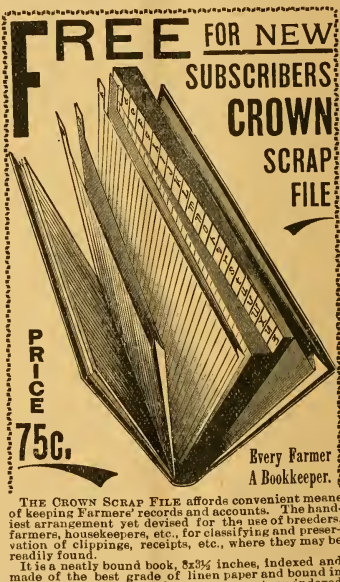
[Mr. Doolittle has something to say on the five-banded bees, on page 648 of this number of the "Bee Journal."—EDITOR.]

Results of the Past Season.

I started in the spring of 1894 with 6 colonies of black bees, and in May I sent for Italian queens, which came all right. I cut out all the drone-brood and destroyed all black queens, and in August all my bees were yellow. I had four big swarms and 200 pounds of comb honey. The season was too dry. White clover did not yield much honey, but basswood was good while it lasted. We had a fair fall flow from golden-rod and smartwood.

The "American Bee Journal" visits me every Thursday and I like it very much. O. A. SANDERSON.

Hayward, Minn.



THE CROWN SCRAP FILE affords convenient means of keeping Farmers' records and accounts. The handiest arrangement yet devised for the use of breeders, farmers, housekeepers, etc., for classifying and preservation of clippings, receipts, etc., where they may be readily found.

It is a neatly bound book, 8x3½ inches, indexed and made of the best grade of linen paper and bound in flexible cloth. Each double page represents an indexed filing pocket, the lower end of which is provided with an inch fold permitting two inches of expansion when the pocket is open to receive and contain clippings and scraps of information. These pockets **will hold one thousand inches** of single column **newspaper clippings.** The index letters on the pockets serve also to index the ruled sides thereof adapted to receive **ten thousand written words.** A large pocket is attached to one lid of the cover to receive miscellaneous items until time permits to classify and drop them into the proper indexed pockets. The file sells separate, **Leather, 75 cents. Cloth, 50 cents.**

Clubbing and Premium Offers.

☞ Mailed on receipt of price, or clubbed with the Bee Journal for one year, both together, as follows: Leather bound Scrap File and the Bee Journal for $1.60; Cloth bound File and the Bee Journal for $1,40. Or, we will give Leather File as a Premium for sending 3 new subscribers to the Bee Journal for a year, and the Cloth File for 2 new subscribers. All new subscribers sent on this offer will receive a free copy of "Bees and Honey."

GEORGE W. YORK & CO.,
CHICAGO, ILLS.

Illinois Convention Reports.—The Illinois State Bee-Keepers' Association still have a good many copies of their Second Annual Report on hand, and no postage to send them out. Any one sending eight cents in stamps to pay postage and wrapping, will receive a copy of same by mail; or seven cents in stamps will pay for a copy of the First Annual Report, if any one desires it. Address, Jas. A. Stone, Sec., Bradfordton, Ill.

Take a Sleigh-Ride as soon as the snow falls in sufficient quantity. See the buggy-sleigh offered on page 638 in connection with a year's subscription to the "American Bee Journal." We don't know of a cheaper sleigh, and equally good. It is also a no-tip-over affair. The "beautiful snow" will soon be here—better get ready to "take a good slide!"

Profitable Bee-Keeping, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

RUDY'S PILE SUPPOSITORY

Is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and free Sample to MARTIN RUDY, Registered Pharmacist, Lancaster, Pa. NO POSTALS ANSWERED. For sale by all first-class druggists everywhere. Peter Van Schaack & Sons. Robt. Stevenson & Co., Morrison, Plummer & Co., and Lord, Owen & Co., Wholesale Agents, Chicago, Ills.
Pease mention the Bee Journal. Nov15

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

Household Repairing Outfit.

This Outfit is a combination of the practical, tried and common-sense tools and materials that will enable anyone with enough ingenuity to drive a nail, to do his own half-soling, boot, shoe, rubber and harness repairing, right at home. No pegs required. Simple wire clinch nails. Saves time, trouble, expense and vexatious "shoe-maker's broken promises." Entire Outfit, neatly boxed, by express, only $2.00.

Or clubbed with the Bee Journal for 1 year—both for $2.60; or given as a Premium for sending us 6 New Subscribers to the Bee Journal at $1.00 each.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & CO., 128 Franklin St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 423 Walnut St.

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H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Colo.

NORTH CAROLINA.—The Carolina Bee-Keepers Association will meet at the Court House in Charlotte, N. C., on Dec. 6, 1894, at 11 o'clock a.m. A full attendance is desired.
Steel Creek, N. C. A. L. BEACH, Sec.

CALIFORNIA.—The next regular meeting of the Central California Bee-Keepers' Association will be held on the first Wednesday in December, at Hanford, Calif. You are cordially invited to attend.
Lemoore, Calif. J. F. FLORY, Sec.

PENNSYLVANIA,—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

ILLINOIS.—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend. B. KENNEDY, Sec.
New Milford, Ill.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1⅓ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.
Indianapolis, Ind.

NEBRASKA.—The winter meeting of the Nebraska State Bee-Keepers' Association will be held at Auburn, Nebr., on Tuesday and Wednesday, Dec. 4 and 5, 1894. All persons interested in apiculture, living between the Atlantic and Pacific Oceans, are invited to be present at that time and place. This has been a close year, for the bee-keeper as well as the banker, or merchant, but we do not propose to "cry quits" so long as bees continue to gather their own living and something for us. Then let all our bee-friends come together and compare methods of the past and their results, and thus learn better how to succeed in the future. Never look too long on the black side of a picture. Brother bee-keepers, come one—come all! L. D. STILSON, Sec.
York, Nebr.

Have You Read page 668 yet?

Honey & Beeswax Market Quotations

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 6@7c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27@28c.
R. A. B & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are quite salable; and 2-pound sections are very little called for. We quote as follows: 1-pound fancy clover, 13@14c.; 2-pound, 12½@13c.; 1-pound white, 12@12½c.; 2-pound, 12c.; 1-pound fair, 10@11c.; 2-pound, 10@11c.; 1-pound buckwheat, 10@11c.; 2-pound, 9@10c. Extracted, clover and basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 50@60c. per gallon. Beeswax, scarce and in good demand at 29@30c. C. I. & B.

CINCINNATI, O., Nov. 8.—Demand is fair for extracted honey at 4@7c. There is a good demand for comb honey at 14@16c. for choice white.
Beeswax is in good demand at 22@27c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, MO., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat, 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6½c.; buckwheat, 5½@6c. Beeswax, 27@29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

KANSAS CITY, MO., Sept, 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

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Descriptions of the above Books, on the page of this copy of the "Bee Journal."

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Why Not Earn a Premium on Page 667?

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VOL. XXXIV. CHICAGO, ILL., NOV. 29, 1894. NO. 22.

EDITORIAL

GEORGE W YORK EDITOR

Give Thanks for blessings you enjoy—
For life and health, and all;
Your gratitude express with praise—
Ye bee-folks, large and small.

The Convention Report is continued again in this number, and we trust that from now on we may not be hindered in crowding it right through.

Hon. Eugene Secor, of Forest City, Iowa, will read an essay on "The Mission of the Birds and Bees in the Orchard and Garden," at the next meeting of the Iowa State Horticultural Society. That will be worth going a long distance hear. Bro. Secor, if he is anything, is a close student of nature, and a most able and conservative writer.

Mr. E. S. Lovesy, of Salt Lake City, Utah, sends us a picture of a honey exhibit made at their Fair this fall, by Messrs. Lovesy, Terry & Co. Mr. L. and Father Terry are shown in the picture, and the exhibit is quite a large one. We understand that they captured the first premium on nearly everything. Which shows what good work they must have done, and what a fine exhibit they must have had.

Management or the Bees? was talked of just a little bit at the late North American convention, "management" being considered of greater importance. Here is what Editor Root said about it in "Gleanings" for Nov. 15:

It was decided at the St. Joseph convention that there is more in management than in races of bees or location. Obviously, bee-journals cannot improve location. They may do a little in the way of betterment of races; but they can do very much in suggesting new and better management; hence, no bee-keeper who keeps even but few colonies can afford to be without at least one good bee-journal.

True, Bro. Root, bee-papers can do, and are doing, much for the advancement of practical and profitable management in the apiary. Scarcely any bee-keeper of any prominence or success goes without one or more good bee-papers now-a-days. And day by day more are coming to see that without the help of a bee-paper they cannot hope to keep up with those who do read and profit thereby.

The American Bee-Keeper for November contains these sentences in its report of the St. Joseph convention:

We note that the press was abundantly honored. Every representative of a bee-paper present, excepting Editor York, who held the office of Treasurer last year, was elected to some office.

Not so fast, our good friend. You have forgotten Editors Leahy and Quigley, of the "Progressive Bee-Keeper," who were present also at the St. Joseph convention, but were not elected to any office—probably because there were not quite enough offices to accommodate every press member present. But we are rather inclined to think

that Bros. Leahy and Quigley felt much like we did—in honor preferring one another. Certainly this editor was pleased to see the honors "passed around," and glad to have the privilege of nominating as his worthy successor, Mr. John T. Calvert, who will be a safe holder of the North American's "pocket-book" for 1895.

Bro. Ernest Root, in a letter we received Nov. 21, said he was "convalescing slowly but surely." His physician ordered him not to do much office work, and even wanted him to drop everything for awhile, but "Ernest" thought it wasn't necessary, as at the rate he was recovering, in a few days he'd be all right. All of which will be welcome news to his many friends.

Buzzings.—In the "National Stockman and Farmer" for Nov. 15, we find the following from Dr. Miller:

Prices of honey don't seem to come up in proportion to its scarcity.

Fifteen to 16 cents seems as high as it reaches in the city markets.

But then everything's low.

Bee-keepers are a hopeful lot.

In spite of the failure most of them have had this year—some of them for three or four years—you hear them now talking quite cheerfully about the prospects for next year.

At one time the prospect looked dreary enough in my locality.

The terrible drouth had killed down the white clover, so it looked dead, root and branch.

I began to ask myself where there was to be any clover for next year.

But I was mistaken about the roots being dead.

The heavy rains that succeeded the drouth brought up the clover all right.

So I'm going to hope with the rest.

Here's my report for this year:

20 lbs. second-class honey at 12½c....	$ 2 50
1,500 lbs. first-class sugar fed.....	75 00
Balance.....	$72 50

Only the balance is on the wrong side.

And I've charged up nothing for my own time and labor, and that of my assistant.

For all that I'm happy.

I've all I can eat and drink, comfortable clothes, and a good Howe ventilator to sit beside, and when I go to church I can hear just as much of the sermon as those that have made lots of money.

And died sooner.

And not had near so much fun.

Maybe next year will give a rousing crop.

I think my bees are in good condition for winter.

Most of them were fed up early.

Hurrah for next year!

Mr. Chas. C. Miller, son of our Dr. Miller, gave us a very pleasant call recently. He is in the employ of a large pickle company here in Chicago—a rather sour business, but it seems to have just the opposite to a bitter effect on "Charlie." He's a vigorous and promising young man, and ought to make his mark away up high some day. We hope he will. A young man can be such an honor to his parents if he so chooses, and such a help in their declining years. But some times it's pretty hard for us young men to equal our fathers in very many things. But we "second editions" *ought* to be improvements on the first. It's a question whether we are.

Mrs. Atchley's little son, Ives, has been very sick with "la grippe," finally running into a pneumonia fever. Mrs. A. has had to be with him constantly, so that her correspondence and other work had to be neglected. She writes that she is almost worn out. This will account for her department in the "Bee Journal" being rather short lately. We hope Ives may soon be all right again, and his mother rested up and ready for business once more.

The A. I. Root Co. is the way it will be after Dec. 1. That's all we know about it now—Nov. 24. Next week we may be able to explain the why and the wherefore.

Sticky Fly-Paper.—While flies don't bother very much when the temperature hovers around zero, still it will be well to know how to catch flies when they are a nuisance again. Mrs. A. L. Hallenbeck wrote the following for the "Progressive Bee-Keeper," some time ago, telling how she manages to ornament a sheet of paper with a lot of "stuck-up" flies that stick themselves to it in a promiscuous and fairly permanent fashion:

Take one pint castor-oil; ½ pint honey, and 1½ pounds resin. Heat the oil and honey together; when hot, add the resin; stir till all is dissolved and thoroughly mixed. Spread on paper, and place where flies congregate. It makes no mess, and all flies stick fast. Two sheets of paper may be placed together, and when wanted, pulled apart by warming a little by the fire. It will not dry up for a long time. Enough may be prepared at a time to last all the season. The preparation can be kept in any covered dish, and used when wanted.

Mr. R. F. Holtermann—the new President of the North American Bee-Keepers' Association—we have the pleasure of presenting to our readers this week by way of a recent picture. Mr. H. was born in Hamburg, Germany, June 14, 1860. When two years old, his parents removed with him to Canada, where, as nearly all know, Mr. Holtermann still resides, and now

President R. F. Holtermann.

edits the "Canadian Bee Journal." If you wish to see Mr. Holtermann personally—and of course you do—be sure to attend the meeting of the North American in Toronto, Canada, next year—probably in September. He will then wield the gavel, and show his "State-ly cousins" how they run bee-conventions in "The Land of the Canucks."

That Italian-Bee History.—We have received a lengthy reply from Mr. C. J. Robinson, of Richford, N. Y., to the comparatively brief article written by Mr. M. M. Baldridge, and published on page 311. Mr. R.'s reply covers five pages of closely written manuscript, and would occupy not less than three full pages of the "American Bee Journal." In the main, the article is simply a *repetition* of what we have already published from the pen of Mr. R., and nothing additional to show that the United States has ever paid a dollar towards importing Italian bees. As we understand the position of Mr. Baldridge on that point, it is simply this:

That the United States never paid a dollar to Mr. Parsons, nor to any one else, for the purchase of Italian bees, or on what is now known as the "Parsons' importation of Italian bees from Italy to the United States;" and that there is nothing on record in Washington to show to the contrary. As all the records are still on file there, or should be, in regard to the relationship of Mr. Parsons, as agent of the United States in Europe, Mr. Robinson should lose no time to avail himself of the opportunity to have those records searched, and the proof brought forward for publication, in order to sustain his position that the United States lost more or less money in the transaction.

Mr. Baldridge claims, if we mistake not, that Mr. Parsons paid for his purchase of Italian bees in Italy, the cash out of his own private purse; that the United States never re-imbursed him for so doing, nor in fact ever made a promise or any effort after the purchase was made to do so; that Mr. Parsons, in fact, was the real owner of the bees that he bought for the United States, and that he had both the moral and legal right to ship the importation direct to his home at Flushing, N. Y., and to keep the bees in his possession until he had a proper adjustment of the matter with the Agricultural Department in Washington; that no adjustment was ever effected, and consequently the United States never got possession of any Italian bees. Mr. Parson's kept the bees and pocketed his loss, saying nothing about the matter except to a few personal friends—Father Langstroth being one of them.

Mr. Baldridge claims to be in possession of the entire history; but he has, up to this time, made no attempt to make it public, preferring to keep "in the dark," so as to draw out Mr. Robinson, and thereby make him show how much or little he knows about the true history of the case.

Mr. Baldridge, on page 311, made no attempt to reply *in full* to all of Mr. Robinson's allegations, but will probably do so by and by. This was done so as to confine Mr. Robinson's reply to his charge, that

Mr. Parsons was "dishonest," as agent for the United States. As Mr. R. gives no documentary proof of that charge, we must therefore decline to publish his reply on matters foreign thereto.

The Los Angeles County convention, of California, held its regular annual session Nov. 12, in Los Angeles. The officers elected for the ensuing year are as follows:

President—Geo. W. Brodbeck, of Los Angeles.

1st Vice-Pres.—Dr. G. A. Millard; 2nd. Vice-Pres., Elon Hart.

Secretary—Allen Barnett, of Whittier; Assistant Secretary, Dr. McDonald.

Treasurer—C. Bergk.

Executive Committee—W. S. Squire, and W. P. Briggs.

Six new members were added to the roll. Considering the season, there was a good attendance. The subject of co-operation was the principal theme of interest, and a committee was appointed to formulate plans and report at the next meeting, which will be in December.

A Banquet to Publishers of agricultural periodicals was given by The Frank B. White Company, *special* agricultural advertising agents, of Chicago, at the Grand Pacific Hotel last Thursday evening. About 50 of the representative agricultural editors and publishers of the United States were present, and most heartily enjoyed the sumptuous "spread" of good things for the inner man, and thereafter listened until almost midnight to "the feast of reason and flow of soul." The writer was one of the fortunates, and was delighted with the commendable good feeling and utmost harmony existing among all present, especially appreciating the "toasts" that were responded to by Mr. J. W. Wilson, of the "Farm, Field and Fireside;" Mr. T. E. Orr, of the "National Stockman;" Mr. W. T. F. Bushnell, of the "Dakota Farmer;" Mr. L. B. Kuhn, of the "Western Plowman;" Mr. Geo. S. Beck, of the "American Farm News;" and Mr. A. B. Colton, special solicitor of The Frank B. White Company.

After the toasts were responded to—all of interest to agricultural publishers—different representatives were called on for three-minute speeches, among those responding being Mr. F. B. Whitman, Chicago representative of the "American Agriculturist;" the Lawrence brothers, of the "Michigan Farmer" and the "Ohio Farmer;" Mr. E. Chubb Fuller, of the "Agricultural Epitomist;" Mr. Heath, of the "Nebraska Farmer;" Solon L. Goode, of the "American Nonconformist;" the editor of the "American Bee Journal," and others.

The object of the banquet was to consider the mutual interests of the agricultural publications of the United States, and to endeavor to promote their general welfare, particularly along the advertising line.

Permit me to say for the encouragement of temperance people everywhere, that no stronger drink than ice-water and coffee were served at the banquet! Hurrah for the Frank B. White Company and the agricultural publishers! The readers of farm papers will be pleased to know that their friends—the agricultural publishers and editors—are, like themselves, no friends of the saloon—the greatest curse on earth!

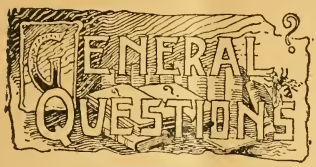
Inside Not Outside.—In the second line of the second paragraph on page 631, read *inside* instead of "outside of the hive." Mr. Smith had it all right in his copy. It was our mistake.

Eight Numbers for 10 Cents.—Yes, we will send the last eight numbers of the "American Bee Journal" for 1894, to any *new* name, for only 10 cents (stamps or silver). Now, here's a good chance to get some of your bee-keeping friends started in taking the "Bee Journal" regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have *three* bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the *last eight numbers of 1894*—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 702 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Rearing Brood on Sugar Syrup.

An old bee-keeper here tells me that bees cannot rear brood on sugar syrup, but must have honey to feed on. Is this true? I have been unable to find anything touching this point in the bee books or papers. J. E. B.

ANSWER.—I don't know that I can give a categorical answer, only that in hundreds of cases bees have wintered on sugar syrup and commenced breeding in the spring so far as yet heard from, just the same as if they had honey.

Foul Brood—Convention Report.

1. Has there ever been any foul brood in North Carolina and bordering States?

2. Was there a report published of the Carolina Bee-Keepers' Association, which was to meet at Charlotte, N. C., July 19? J. C. M.

Globe, N. C.

ANSWERS.—1. I don't remember to have seen mention of foul brood there, but it may exist for all that. If any one knows of any, perhaps he will report. It's generally safer to have an open than a secret foe.

2. I have some doubt whether such report was published, still there might have been a very brief report that escaped my attention. There can hardly be any satisfactory reason why North and South Carolina should not have a good convention and a good report.

Correct Spacing of Frames.

For correct spacing of frames in 8-frame dovetailed hives, instead of using ⅞ division-board why not space frames dividing the ⅞ on either side between the first comb and the side of the hive, thereby giving more storage room for honey, barring the inconvenience of interchanging the two outside combs if you should so wish? C. B. H.

ANSWER. — The inconvenience you mention is sufficient objection. Aside from that, if you use fixed distances, you couldn't easily crowd frames enough to one side to get out the first frame. If you use loose hanging frames you can make it go all right. Still there would be left the trouble that you'd have a lot of deep storage cells outside that the bees would have to cut down whenever they wanted to put brood in the outside comb.

Finishing Incomplete Sections.

At the time of taking off surplus, finding some sections not complete (especially at the bottom), in returning to the hive for completion, why not reverse the sections, placing the most work to finish at the top? Is it not correct that they work the more readily at the top of their work?

ANSWER.—Yes, bees seal up faster at the top than at the bottom, and reversing might hasten, providing there isn't too much slant in the cells, as there is sometimes when deep. But I find that a re-arrangement of sections isn't generally a very satisfactory thing.

Those New Subscribers, that you have long been thinking of getting, are very likely ready now to give you their names. You know that besides "throwing in" the numbers for the rest of this year to new subscribers for 1895, we also give each one of them a free copy of the 160-page book, "Bees and Honey." Yes, and we will give you a premium for getting the new subscribers, as you will see on page 702. Better at once "get after" those bee-keeping friends of yours, and secure their subscriptions, so you can send it with your own renewal before the end of December. To double the present list of readers of the "American Bee Journal" will mean more than a doubly better paper for all. We can guarantee that. If each subscriber sends only one new name, the thing will be done. Will YOU do it?

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

An Acre of Rugged Health.

Every family on a farm should have an acre of rugged health. City people, as much as they can get—which is usually little enough! What mysteries and revelations are contained in an acre of Mother Earth! They only will know who personally and familiarly shake hands with this silent but beneficent Force! The planning and the digging, the planting and the watching, the joy of blossoms and delight of reaping added to the benisons of sunlight and fresh air—how all Nature smiles at the glorious result? By all means determine on it, and let no obstacle shake you from it.

Of course there will be opposition at first from the head of the house. There usually is, until the good wife shows the better way? "O I don't want to fuss with a patch of garden truck." No; oh, no, his lordship can condescend to no such small things!—but you *insist* on having that acre, not far from the barn, plowed deep and fenced, and you are mistress of the situation! Along, and all around the fence, plant berries of all kinds—black, rasp' and goose berries. They take up little room, and will afford luscious eating. Then measure off a generously large square for a fine bed of strawberries. Ah, just think of going out there to pick a "mess" of the rubies every day during their season!

Then comes your "tater" patch for earlies, and the sweet-corn that makes the children's eyes stick out! And in that especially rich spot, right over there, put in plenty seeds of water and musk melons. O just look at them grow! What a feast till frost comes! And the lettuce, beans, "cow-cumbers," spinach for "greens," and raddishes that bite; peas that children delight to shell, and onions that make you cry whether there is anything the matter with you or not!

Of course you won't forget to set out a few apple and cherry trees—they *always* do well. Might try a few peach and plum trees, they *may* fruit. But one more plant you must remember—pie-plant—lots of it. Whether stewed or "pied"—it's always fine! It can be canned for winter, and no better, healtheir food (luxury, rather) grows anywhere.

And don't forget the flowers—any and all kinds, not omitting roses and hollyhocks, pansies and forget-me-nots. In your efforts to do all this, you have coaxed the very sunlight into your heart. You have extracted for yourself and children that richest of blessings—rugged health. You have taught that "horrid man" a lesson of woman's ingenuity, and will have the satisfaction of seeing in that husband's wistful gaze the unuttered eulogy, "Ah, Jenny dear, that's a pretty big head on those small shoulders!" And in the future he is yours to command!

Hard Hearing.

What has been said of causes of coughs, on page 634, applies with special force to difficulty of hearing. It is frequently noticed that from the same exposures suddenly one will become, in a manner, deaf. This is particularly the case in persons who have a catarrhal difficulty of the nose or throat. A chilling exposure aggravates the catarrh, closing the canals that connect the ears with the throat, preventing the free entrance and exit of air, thus producing dullness of hearing. Sometimes these tubes become permanently closed, in which case restoration of hearing is impossible. Or inflammation of the internal ear may occur, resulting in suppuration, which may occasion rupture of the drum of the ear, that the discharge of matter be accelerated. Such results often attend acute catarrhal conditions. This accident often impairs hearing permanently.

Then, too, the impaction of hardened wax in the ear is another cause of deafness; so are polyps or foreign substances in the ear. These conditions frequently give rise to disturbing noises in the ears—snapping, cracking, hissing sounds that almost drive one to dispair! Very many of these wretched results can be obviated by more care of one's self than usual, and if attacked, by proper, though simple treatment. Warmth is one of the first comforts necessary to relief or cure—either in bed or comfortable room. In the more acute conditions, take No. 1 (of the new remedies out of the "Bee Journal" Remedy Case) every hour for a few days, until all fever and acute conditions have subsided, then take No. 13 every

four hours, during the day, until quite recovered.

If much noise in the ear continues, take No. 14 night and morning. An *occasional* dose of No. 11 will do much to *prevent* the complications above mentioned.

I am certain the use of the remedies contained in the "Bee Journal" Remedy Case may save hundreds of dollars' expense to many a household.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Dec. 4, 5.—Nebraska State, at Auburn, Nebr. L. D. Stilson, Sec. York, Nebr.

Dec. 5.—Central California, at Hanford. J. F. Flory, Sec., Lemoore, Calif.

Dec. 6.—Carolina, at Charlotte, N. C. A. L. Beach, Sec., Steel Creek, N. C.

Dec. 10.—W. Washington, at Tacoma. G. D. Littooy, Sec., Tacoma, Wash.

Dec. 18, 19—Northern Illinois, at Rockford, Ill. B. Kennedy, Sec., New Milford, Ill.

1895.

Jan. 2, 3.—Michigan State, at Detroit, Mich. W. Z. Hutchinson, Sec., Flint, Mich.

Jan. 9.—Indiana State, at Indianapolis, Ind. Walter S. Pouder, Pres., Indianapolis, Ind.

Jan. 21, 22 —Colorada State, at Denver, Colo. H. Knight, Sec., Littleton, Colo.

Jan. 22-24.—Ontario, at Stratford, Ont. W. Couse, Sec., Streetville, Ont.

Jan. 28.—Venango Co., at Franklin, Pa. C. S. Pizer, Sec., Franklin, Pa.

Jan. 30, 31.—Vermont, at Middlebury, Vt. H. W. Scott, Sec., Barre, Vt.

Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.

——. ——.—North American, at Toronto, Can. Frank Benton, Sec., U. S. Dept. Agriculture, Washington, D. C.

☞ **In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

North American Bee-Keepers' Association

OFFICERS FOR 1895.

PRES.—R. F. Holtermann.....Brantford, Ont.
VICE-PRES.—L. D. Stilson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson...Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

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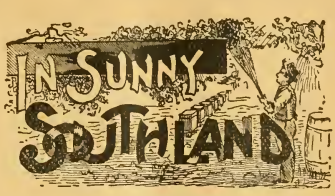
Great Premiums on page 702!



CONDUCTED BY

MRS. JENNIE ATCHLEY.

BEEVILLE, TEXAS.

A Bee-Meeting Explanation.

Some are asking me about the half-fare rate, and wishing to come to the convention and remain here, expecting to get half-rates to the bee-meeting. I will say that the railroads will not give a half-rate on account of the bee-meeting—it is for the regular Christmas holiday excursions that half-rates are usually given, and our railroads here always give such rates at Christmas time.

But if you wish to take advantage of the half-rate and then remain here, your only chance is to buy an excursion ticket to San Antonio, and sell your ticket to the brokers for what you can get. Otherwise you would have to pay full fare. San Antonio is 90 miles north of Beeville. JENNIE ATCHLEY.

The South for Work and Bees.

MRS. ATCHLEY:—I have become very much interested in your "Sunny Southland" department in the "American Bee Journal." As I am thinking of going South in the near future, I wish to ask your opinion of the advisability of such as I to come to that country.

I am a single man—an engineer and machinest by trade—and at present I am out of employment, which is the case with thousands of others in this country. I also have some knowledge of the bee-business, having kept bees for a number of years on a small scale, and never allow anything to go unread on the subject of bees, that comes under my notice.

What I would like to do is to go to a country where the expense and risk in wintering is done away with, as I find that is the greatest drawback in keeping bees in this part of the country. Do you think it advisable for me to go to Texas expecting to find work in my line of business, with the object in view of some

day to embark in the bee-business? Of course I would be willing to work at anything that I could do, if I could not get work at my trade.

The main object in writing this is to find out, should a man come to that country (without capital), could he find plenty of work to make a living? Or has the country already more workmen than are needed? SUBSCRIBER.

Northern Minnesota, Nov. 10.

Friend S., I do not think it would be advisable to come to Beeville just now expecting work. However, you might find work here. There are four to six brick houses going up in Beeville nearly all the time, but I think there are plenty of laborers here now. I am not posted in regard to machine work, as my time is almost wholly taken up with the bees, and I have no time to investigate such things; but San Antonio, 90 miles north of here, is a city of 60,000 inhabitants, and has considerable public work going on constantly, and you would be likely to find employment there, or at some other towns in southwest Texas.

There is no winter loss here in bees caused from cold, as it does not get very cold here. But bees can be neglected here and allowed to starve to death in winter, etc.

I think you would better come and look at the country before you move.

JENNIE ATCHLEY.

Bee-Management in Florida.

[Owing to the severe illness of her son, Mrs. Atchley has been hindered in preparing and forwarding matter for this department, so we take the following from "Gleanings" for Nov. 15, being from a "Sunny Southland" bee-keeper. Mr. Mitchell's crop this year was 21,500 pounds from 57 colonies, spring count.—EDITOR.]

I use the 8-frame dovetailed hive, 3 stories high, exclusively, in my own apiary. For several years I used the two-story 10-frame hive, but greatly prefer the 8-frame three stories high, as it enables me to gain all the advantages of a large hive without having to do any heavy lifting. I use seven frames in the two upper stories for extracting from, and practice tiering up to thoroughly ripen my honey; at the same time I give the bees plenty of room to store.

I extract from the upper story, then lift up the second one, and place the extracted one underneath. This placing of seven empty combs right in the middle of the hive seems to incite the bees to do their best to fill that empty space; for the way they will pile the honey in there is astonishing. In the meantime the full combs in the upper story, being in the warmest part of the hive, are thoroughly ripened and capped over ready for extracting by the time the second story is full enough to be lifted up. I claim by this method to obtain more well-ripened honey than would be possible with a two-story hive.

Equally good results could be obtained with the 10-frame hive worked in the same manner, but it is too heavy to handle; but I find I can handle the 8-frame body, with seven frames of honey, without any great muscular effort, although I am anything but a Hercules.

Having three stories entails some extra handling to lift the second story off, put the empty one in place, and the full one on too again; but to offset that, a little smoke puffed into a third story of capped honey depopulates it of bees to such an extent that the brushing off is a small matter compared to the same operation with a two-story hive. Then there is less trouble with swarming, less hanging out, and making increase is as easy as falling off a log. I merely lift off the third story, see that it has a frame of brood in all stages; move the two lower stories to a new location, leaving the single story in the old. The bees already on the combs, reinforced by the field-bees, give me a strong colony that never fails to rear a good lot of queen-cells.

In extracting I run honey from the extractor through cheese-cloth into a large tank holding about 1,600 pounds, where it stays until I need more room, when I draw it off from the bottom into barrels, for shipment.

H. W. MITCHELL.

Hawk's Park, Fla.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

Have You Read the wonderful Premium offers on page 702?

Best Size of Frames and the Number to the Hive.

Query 950.—1. Without taking into consideration the desirability of conforming to a standard size, would an eight-frame hive having frames of the Langstroth length and 11¾ inches deep, be better than an ordinary eight-frame hive?

2, If so, why? and if not, why not?

3. Would it be better than a ten-frame Langstroth hive?

4. If so, why? and if not, why not?

5. If there were no standard, what would you consider the best depth for a frame of Langstroth length, and how many of them should be in a hive, if the frames are all in one story?—Colo.

I am not prepared to answer these questions.—M. MAHIN.

I don't know. I'm open to conviction all around.—C. C. MILLER.

In my out-apiary I use a 10-frame Langstroth hive, and consider it next best to the Gallup frame.—G. M. DOOLITTLE.

I have always used the Langstroth frame, eight to a hive, and have had no experience with any other.—MRS. L. HARRISON.

2. Too deep for best results in comb honey. 3. No. 4. Same reasons as above. 5. Regular standard 10 frames. —S. I. FREEBORN.

1. I should not prefer it. 2. Too deep. 3. No. 4. Too deep. 5. A frame of the Langstroth size, and 9 or 10 to the hive.—J. P. H. BROWN.

1 and 2. Better for winter, and not so good for section honey. 3. Better for winter, and for all purposes quite likely as good as any.—P. H. ELWOOD.

1. No. 2. Because I would rather make the Langstroth frame shallower than deeper. 3. No. 4. Because it would be too deep. 5. About 7½ inches, 10 frames to the hive, would be the best for honey-production, I think.—J. A. GREEN.

1. No. 2. Because you could get no better results, and it would cost more. 3. No. 4. You could get no extra results. 5. Just as now made—8.—B. TAYLOR.

1. Yes, I think so. 2. Because it would give more comb surface. 3 and 4. I don't know. 5. I prefer the standard Langstroth frame with 10 in a hive.—W. G. LARRABEE.

1. For your State I don't know what would be most desirable. 5. I doubt whether an all-around frame can be suggested that would be better than the Langstroth.—EUGENE SECOR.

I use the regular Langstroth frame, 8 in each story, and 3 stories high for extracted honey. The Langstroth frame is good enough—why bother or putter with odd-sized frames?—E. FRANCE.

1. We wish to work for comb honey, and shallow hives are best. 2. I prefer the regular 8-frame hive. 3. I doubt if one uses a hanging frame if there is any better hive than Langstroth 8-frame, regular standard size.—A. J. COOK.

1. Decidedly no. 2. For extracted honey there would be little objection, but for comb honey the bees have too far to travel. 3. I think not. 4. Because Langstroth is standard. 5. I should prefer 10 frames not over 7 inches deep.—C. H. DIBBERN.

1. Yes. 2. Because I prefer a large brood-chamber. 3. It might be just as good if it had as much room. 4. Same as No. 2. 5. I like the dimensions of a 10-frame Langstroth. I think if the frames were deeper the bees would consume the more time in their travels.—JAS. A. STONE.

1. I believe for a cold climate they would be preferable. 2. It gives more cubic inches of brood space, hence more populous colonies. 3. Try it and report through the "American Bee Journal." I don't know. 5. At a guess, the dimensions you give and 10 frames to a hive. —J. M. HAMBAUGH.

If you have in view the safe wintering of the bees, the deeper the frame the better. If you consider ease of handling, etc., to the exclusion of the benefits to be derived by a deep frame for wintering, the Langstroth frame is the best. This answers all of the questions.—EMERSON T. ABBOTT.

1. No, worse. 2. The frames are too deep, and the hive holds too much comb. 3. No. 4. The 10-frame hive presents more top surface for the sections without being materially larger than the one

proposed, while the latter would have more honey at the tops of the frames, which is a serious evil. 5. I much prefer the sectional hive; barring that I should prefer a hive shallower than the Langstroth hive rather than deeper.—R. L. TAYLOR.

It all depends. There are so many things to be taken into consideration. I have always thought the Langstroth frame was too long for its depth. My best success was with a frame shorter and deeper than the Langstroth; yet at same time I had in use 880 Langstroth frames.—H. D. CUTTING.

1. I think not. 2. Look at a strong colony clustered on the ordinary frame, and you will see by the shape and size of the cluster, that it is very well adapted to their needs. 3. Yes, I think so. 4. There is not so much empty space to be kept warm. 5. Eight frames, 9⅛ inches deep.—MRS. J. N. HEATER.

1. No, it would not. The regular size is deep enough. 2. Experience is the best teacher, and the great majority of Langstroth hives over all others in use, is the "why." 3. This is a mooted question. I prefer the 10-frame hive. 5. The regular size that has been used so many years, and found to be "the thing."—J. E. POND.

1. I think not. 2. Because time and use has proven that the Langstroth frame is not too shallow to hurt. Besides, you are not bound to use only 8 frames; if your bees need more comb space, use 10 frames. 3. No. 4. Because I can't see it. 5. I would say 8 inches, and 10 frames in each department.—G. W. DEMAREE.

1. No, it would not, though such a depth would be perhaps as good for extracting. 2. A deep frame is not as good in producing comb honey as a shallow one. 3. No. 4. Because bees will store more comb honey over a shallow frame. 5. A brood-frame 7 inches deep, like the Nonpareil, 8 to the brood-chamber, gives the best results for comb honey.—G. L. TINKER.

1. Too much comb and weight in a frame that size for me. I do not think it would be as good. 2. Too deep for easy manipulation. If I were going to change the Langstroth frame at all in depth, I would make it shallower rather than deeper. 3 and 4. No; for reasons stated above. 5. About 7 inches deep, 10 frames to a hive; and with my experience I would have a hive only one-story for either comb or extracted honey. —MRS. JENNIE ATCHLEY.

The Langstroth frame has always been my favorite, but I have often thought I would like to try a Langstroth frame one inch deeper—improvement (if there be any possible) being obviously in that direction. I doubt the wisdom of carrying it so far as the figures you mention. An 8-frame hive of this enlarged size would undoubtedly be liberal enough in size.—W. M. BARNUM.

We would use 10 frames, say 12 inches deep, and of Langstroth length. Our reasons are that the queen always lays eggs in a circle, and she should be able to lay as large an amount as possible without having to hunt. For this reason a shallower frame is objectionable. Another point in favor of the deeper frame is in the need of honey over the brood-nest in extreme cold weather, as the bees often starve when the honey supply fails above them. A square frame would be better than any other, if it were not that it leaves too little room above for surplus cases, which compels tiering up too high.—DADANT & SON.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

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Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

OBSERVATIONS AND EXPERIMENTS.

Toronto Island—Queen-Rearing and Mating—Other Interesting Apiarian Matters.

BY JOHN M'ARTHUR.

Before going into details on queen-rearing, permit me to give a description of our lovely island.

Toronto Island is a tract of land formed of sand washed up by the rivers—Niagara, Don and Humbee—situated in Lake Ontario directly in front of the city of Toronto, Ont., Canada, distant from main land two or more miles. It embraces 5,000 acres; width across 1¾ miles. Ten years ago it was a barren desert. Since then Toronto has doubled its population, which is now 188,000. A demand was made for more park accommodation, 300 acres being set apart for that purpose on the Island. Thousands of nectar-producing trees have been planted, clover grows luxuriantly, and yields nectar until the middle of September. The "desert" now "blossoms as the rose." Thousands of citizens, and many United States people, visit the park during the summer months. It is one of the city's attractions. A great many summer residences occupy the south and west shores. The light-house, hospital for sick children, and Hanlan's hotel on the west, and Wiman's baths on the east, are points of attraction. No liquor is allowed to be sold. The city owns the island, and you are not allowed to put anything on the island without a permit—not even bees. Ferry boats run every half hour from Yonge, Brock and Church streets wharfs. Postal collections and deliveries are made twice daily; it also has telephone connections.

The attempt was made ten years ago to rear queens. Owing to its bareness it had it be abandoned. Then my attention was turned to the necessity of seeding the island, which has been going on ever since. During the last four years a small apiary has been maintained, last summer numbering 45 colonies. The prospects for 1894 were to make the apiary a little attractive. The islanders patronize me, and buy considerable honey. It is a fine center for selling honey, as many as 7,000 people being found in the park during the warm days of summer. Some days a rousing trade is done.

The flora of the island is very limited, consisting of sweet clover and scarlet lobelia—a very handsome flower, producing an excellent honey. Asters and golden-rod are to be seen in little patches. With the amount of sweet clover sown last season, there should be several hundred acres next season in blossom—enough to support quite an apiary, and will then be one of the best, if not the very best, on the continent for queen-rearing and experimental purposes. It is somewhat ex-

posed, and liable to be laid waste by hurricanes, which will have to be guarded against. Three of those storms visited the island in July, August and October, 1893. The first did not do much damage. On Aug. 17, it came nearly annihilating us. It left only five standing colonies. I stuck to my post and kept setting them up as they were blown down, to save my fine queens, but it was of no use, as it lasted so long. At last I was blown against a small tree, and there anchored. On Oct. 15 it was just about as bad, but I was prepared. The loss was not so serious as it was disappointing, as some 30 customers had to do without queens. With this exception, the island is perfect for queen-rearing and other experiments that may require isolation.

CARNIOLAN BEES.—I commenced with Carniolans first, because I found them a very gentle bee and amiable in disposition. My home yard, of 250 colonies sometimes, was within 50 feet of the busiest thoroughfare of the city, and demanded gentle bees. After breeding them some time I saw one objection—the great difficulty in find the queens. They were very shy, always seeking cover. The bees behave beautifully on the combs, and the queen hides so among them, with such a similarity in color, that in strong colonies it was almost impossible to find her.

Another good feature of Carniolans is, they wintered well. They looked so well that in the winter, or rather spring, of 1890 I sold right out of the cellar 165 colonies on April 1, to the Ontario Honey & Apiary Company, and 50 more to another bee-keeper, leaving me with only 33 in the home yard; those produced four tons of beautiful honey, besides plenty in the brood-chambers to bring them to a new crop. The perfect bee, I thought, if they had the yellow color.

I then selected the best queen and reared nine from her, and sent them to the island and with hand-picked yellow drones from my best and gentlest yellow colony in one of my out yards. I was successful in mating only one. This cross produced workers about half Italian and half Carniolan. As soon as this queen produced eggs they were given to a colony to rear queens from, and crossed again with the same drones. This was repeated four times in 1890, the first cross showing the most marked results. Any change after that was slow and gradual. Four straight crosses were made before much change was seen in the drones. You could see the change first on the underside of the abdomen, becoming lighter colored. The bronze coloring gradually rose up and closed over the first segment next to the thorax. At the eighth cross, yellow blotches or patches could be seen making their appearance all over the abdomen, more especially on the three upper segments. At this cross the workers were evenly marked three-banded. It has taken eight more crosses to produce the fourth and fifth bands. The seventeenth cross brings 100 per cent. 5-banded. The drones are not so bright as I would like. But many are the bee-keepers that would be satisfied with them, and think them perfect.

In using the term "cross," or "crosses," it might be as well to make an explanation, not wishing to be misunderstood. We will term it "in-and-in breeding." The sire dies at mating, and the dam mates only once in a lifetime. If it can be termed "in-and-in breeding," then it is not what stock-breeders would call "close breeding." Sire and daughter cannot couple, nor dam and son. The drones used in breeding have been the progeny of one queen for four years. The queens have been bred in a direct line from the Carniolan, and selecting those of the most uniform color, there being considerable difference, and I am not able to fathom nor give a reason why a queen producing uniform stock—say every worker three-banded, or four—should not produce every queen evenly marked. They don't, some being entirely golden, some with black tip, others two-bands, while some are nearly all black. The last two queens hatched were from a pure yellow queen, and

workers evenly marked four-banded. Both queens were black. They were hatched in a black colony. Did the nurse-bees effect them in any way? Whatever way they came thus colored, it was the law of atavism or ancestral influence, I suppose. Those if mated to yellow drones produce as bright stock as the yellowest queens, and evenly marked.

In thus breeding, I have been able to establish the gentle character of the Carniolan, larger workers than the original, with from three to five yellow bands, good honey-gatherers, and good to winter. Such can be handled without smoke or vail, at any hour of the day, whether honey is plentiful or not. The queens and drones are completely yellow. We invite inspection, and with the greatest of pleasure welcome all who love and follow bee-keeping. Come and see them handled. To have such makes bee-keeping easy, and causes it to lose its terrors. One prominent bee-keeper objected to them because they were too quiet. "Everybody would keep bees and spoil the business," was the remark made.

(Concluded next week.)

SIMPLE HIVE-CONSTRUCTION, ETC.

BY EDWIN BEVINS.

On page 600, Dr. Miller indulges in some criticisms of my tailless dovetailed hives. That is all right, Doctor. I have been expecting that some one would sooner or later criticise them in just that way. I wish here to proclaim that the changes were not made with any idea that they would be improvements. The point I wished to make was, that any man who felt disposed could make a very satisfactory hive with inexpensive tools, and save some money by so doing. When it is desirable to tier up hive-bodies, it may be better to have hives of different construction, but as long as I use them only to put section-cases on, I think I shall run up against no very serious difficulties in their management. When my bees store surplus enough to more than pay for sugar for winter feed, I may buy dovetailed hives of the orthodox pattern. But, come to think of it again, I don't like the orthodox style. The alighting space is too narrow, and so I make my bottom-boards two feet long, and nail a piece of wood two inches square under each end, the front one just even with the end of the board, and the rear one an inch or two from the end.

I fail to see what serious objection Dr. Miller can have to the cleats projecting below the cover. With the grooved cleat, a part of it projects below and a part above the cover. The part above the cover hinders the flow of water when it rains and moisture gets in between the cleat and the end of the board, causing them to swell, and then they shrink and check, and decay eventually sets in. If the cleat does not project below the cover, the cover very easily gets out of place. I make the cover long enough to acccommodate a cleat so heavy that the cover cannot warp, and when placed on the hive it stays where you put it without the aid of hive-hooks or stones. This cover has the advantage of being perfectly smooth on top These covers and bottom-boards cost less than 5 cents each for material.

I confess that when hives are to be piled up there is some advantage in not having any entrances cut in the hive body, but where one winters bees on the summer stands, there is not much piling up to do. My experience is yet too limited to enable me to understand the necessity for having hives that leave no space below the frames when placed on a flat surface. I make them in the way outlined in a former article, because I can make them easier with the tools I have than I can make them with grooved cleats and ⅜ inch strips. They answer my purpose very well, and save me some money. But I suspect that this subject has little or no in

terest for most of the readers of the "American Bee Journal," and is not worth space in its columns. So I will say no more about it.

My allusion to the sugar-honey discussion in a former article, was not intended or expected to revive interest in the matter. We all supposed the thing to be dead and buried, and its little body nicely tucked around with a blanket of sweet oblivion. We were all rejoicing that the thing was so early done for, and wondering what in the world it was ever begun for. Let there be for it no resurrection.

The handsomest apology a man can make for an error of opinion, honestly held, is to abandon it as soon as its character comes to be understood. If anybody tried to extort from Prof. Cook any other kind of apology, Dr. Miller was right in defending him against such humiliation.

Leon, Iowa.

THE NORTH AMERICAN—SOME SUGGESTIONS.

BY F. H. RICHARDSON.

The Quarter Centennial meeting of the North American Bee-Association has been held—the St. Joseph convention is a matter of memory, and the Toronto meeting is something to be talked of and discussed. The writer had the pleasure and profit of attending the St. Joseph convention, and while on the whole the time is considered to have been well spent, yet there were things which were to some extent disappointing, and of these I would speak.

Prominent among the convention features which I would condemn, is the reading of lengthy and unprofitable essays to the exclusion of the discussion of practical questions. To illustrate: The writer, at the convention, placed in the question-box two questions, viz: "What steps can be taken to prevent the bees from sticking the frames, hive, sections and covers fast with propolis?" "Would it not be better to divide the North American Bee-Keepers' Association into four general divisions—North, East, South and West divisions—with four divisional meetings per year at different times?" These questions I believe to be intensely practical. The nuisance of glued-up frames, hive, sections and covers, could, I believe, be entirely done away with, with slight cost; and the division of the North American Bee-Keepers' Association I believe to be essential to its continued prosperity. Yet these questions were entirely crowded out by the reading of essays, which, while valuable in themselves, have their proper place in our bee-papers, and not in our conventions, where, by reason of the peculiar conditions, but few of their valuable points are brought out.

Take, for instance, the essay of Secretary Frank Benton, which was, I believe, one of the most valuable read, and was really a very enjoyable work; yet, in view of the fact that it was likely to appear a little later in the "American Bee Journal," I claim it was a waste of time to read it in convention.

How, then, would you employ the time, did I hear some one say? Well, first and foremost I would transact all the necessary business of the convention, and employ all other available time in the discussion of such practical questions as might be brought up.

If I rightly understand the aim and object of the North American Bee-Keepers' Association, it is principally to bring about sociability and an exchange of ideas amongst bee-keepers, by bringing in personal contact at the annual meetings those who otherwise would probably never meet. If the Association has any other important object, I fail to discover it from a study of the Constitution. Such being the case, it therefore follows that the meetings are the whole life of the Association, and it also follows that the more meetings that are held (within reasonable limits),

the more good the Association will do, and the more prosperous it will become. One thing is certain—an annual meeting is not sufficient. There should be a meeting in the East, West, South and Center each year.

I notice on page 536, that Mr. Craycraft advocates two meetings a year, and according to his plan we would have a meeting in each section *once in three years.* Well, Friend C., once in three years may do for you, but I like to "shoot off my mouth" too well to wait so long for a chance to talk, ask questions, and get sat down upon by both the President and Dr. Miller! No, sirree! I want a meeting in the East, South, Center and West (not Dr. Miller's "West," *i. e.*, Missouri, but in Utah or California) each year, and this is how I would do it:

I advocate dividing the Association into four general divisions, viz: Eastern, Western, Central and Southern—each division be separate and distinct, except that they all be under an advisory council consisting of the ex-presidents of each division for the two preceding years. That is, supposing it to be now arranged that way, the ex-presidents of 1893 and 1894 would be the council at this time, and next year the ex-presidents of 1893 would vacate in favor of the ex-presidents of 1895. This council would act as a sort of "check" on the divisions, by arbitrating any differences which might arise, and except that the divisions all work under the same Constitution, and be bound to send at least one delegate to the meetings of each other division.

This would fix it so that all could attend a meeting each year, and by the delegates, the whole country would be represented at each meeting. Each division should be so strong in members that it would be no hardship to send the delegates, and pay all his, her, or their expenses.

Now the foregoing is but a rough outline, and only intended to provoke discussion. I am convinced that some such scheme of division could be successfully worked to the great benefit of all concerned. Now all of you get up and make your speech, and let us know what *your* ideas are. Laclede, Mo.

[The above is just in the line of what is needed—a discussion and suggestions looking toward an improvement in the work of the North American. We are glad Bro. Richardson is doing his part in trying to keep the ball rolling, that we started on page 423, where we suggested "semi-annual meetings." Of course he "goes us two better," but no matter, we are sure only good can result from an examination of all the individual theories and ideas on this subject, if we can only find out what they really are, or what is earnestly desired by the majority of those interested.—EDITOR.]

MORE CALIFORNIA NOTES.

[On page 628 we published some notes by Mr. W. A. Pryal, on his trip in the northern part of California, while he was out with Mr. Martin (Rambler) and Mr. Wilder. Below we give some more from Mr. Pryal's graphic pen, that was written quite awhile ago, but will be just as interesting now. The letter was dated at Brocksburg, Humboldt county.—EDITOR.]

The woods are said to be full of wild honey-bees here. At Lower Lake, in Lake county, Mr. Martin called upon a gentleman who had located in that town during the last year, having come from Washington or Oregon, I forget which. In January and February, of this year, he cut 54 bee-trees, and captured the colonies. He has something like 60 colonies now (Sept. 10), all obtained this year. He reports the sale of $96 worth of honey as the result of the past season's work. He has faith in the possibilities of Lake county as a bee-section.

At Lakeport, in the same county, I called upon Mr. M. B. Morby, to whom I sold some Italian queens last spring. He had been a bee-keeper in his native

Sweden, and since his arrival in this country, five years ago, he has given some attention to bees. He keeps them according to modern methods. He has been at Lakeport for some years, and during all that time he has found that bees do well every year. He began operations by keeping his bees in the hive he used in his fatherland. It is a long hive, quite deep and narrow, the frame being, I should judge, 14 inches deep. A couple of years ago one colony, in one of these hives, yielded 900 pounds of honey. How is that for Lake county? What part of the United States can do better? That beats the report of B. F. Carroll, of Texas, who some ten years or so ago reported 1,000 pounds from one colony and its increase. The Lakeport colony, so Mr. Morby says, gave the 900 pounds *itself*, without the aid of its increase. I did not learn whether the colony swarmed that year or not.

This year Mr. M.'s bees have done well. During my visit at the very beginning of September, they were bringing in much honey, and storing it in the surplus apartments. At my home (North Temescal, Alameda county), at the same time, my bees were bringing in only enough to barely live on. We have few flowers in summer and fall there.

In the same county (Lake) I saw a small apiary composed of box-hives. I did not stop to enquire if the bees did well or not. I do not suppose their owner would be able to tell, anyway, for what box-hive bee-keeper is able to judge of such matters? We learned that there was a man some distance back of Lakeport, who kept bees, but we did not call on him.

At this place (Brocksburg), we called at Mr. Hope's. He is keeping 12 colonies in old-style Langstroth hives. (By the way, Mr. Morby, referred to above, has adopted the 8-frame dovetailed hive, as made at a factory in this State). Mr. Hope's bees did well until he removed the hives beneath the dense shade of the trees back of his house. His home is on an eminence immediately overlooking the little town, and part of his land was pine and brush land, he having cleared it off. He has a fine young orchard which is now yielding largely of luscious fruit. He is showing the people of this grazing country what can be done in the fruit line. I have seen a few other places, so far in this country, where they have thrifty fruit-trees, heavily laden with as fine appearing fruit as I have ever seen in this State. One thing I notice is, that the fruit crop is much later hereabouts than it is in the counties within a radius of 50 miles of San Francisco. Of course this is well toward the northern portion of this State; besides, the latitude is much higher than the famed fruit sections of California, Still, perhaps, some day, when there is a railroad through these counties, and the large sheep ranges are divided up into small holdings, there may be more fruit grown, and the country may wear a more prosperous appearance than it now does.

I was astonished to find so much timber land in Lake, Mendocino and Humboldt counties. I knew that there were many big trees in these counties, but I did not think that there was such an endless profusion of it. With all the big valleys, to say nothing of the southern deserts of the State that are treeless, still there is more than enough timber along the coast in the Sierras to more than compensate for the want of trees in the former portions of this wonderland.

W. A. PRYAL.

☞ "People about here say they cannot afford to take the 'Bee Journal.' They say the bee-business does not pay enough; but I tell them that the 'American Bee Journal' is a good paper—that it *makes* the business pay. So send it another year."—Wm. F. Lancaster, of Indiana, Nov. 15, 1894.

PROCEEDINGS

OF THE

Twenty-Fifth Annual Meeting

OF THE

NORTH AMERICAN

BEE-KEEPERS' ASSOCIATION.

BY FRANK BENTON, SEC.

[Continued from page 530.]

The convention re-assembled at 2 p.m. The Secretary's report was called for, read and accepted.

Report of Secretary.

As Secretary, I wish to report, first, that membership-cards like those which have been received by nearly all present, were mailed to the names and addresses of all who are recorded in the published proceedings of the Association for the last seven years; also to some other bee-keepers whose addresses were available. Eight hundred of them were printed. Over 600 of which, with space for the signature of Treasurer left blank were signed by myself and sent out. All the recipient needed to do was to forward the card with dues to the Treasurer, whose signature made it a receipt for the money, and at the same time a neat evidence of membership. About 1,200 two-page, letter-size circulars and 1,800 note-size circulars have been mailed to the various States and Territories and the Provinces of Canada. Notices were sent to 107 agricultural journals distributed throughout the Union. The object of these circulars and cards was not only to remind those who have heretofore attended these conventions, of the time and place of this meeting, and that we would be glad to meet them here, but an effort was made to induce them to retain their membership continuously. There was considerable money left over after the last meeting, and it seemed to me that a few dollars of it could not be better spent than in explaining the objects of the Association and what is needed to enable it to carry out those objects most effectively.

I have two communications from honorary members which I think should be mentioned in this report. One is signed by C. Mansfield, secretary of the Hunter River Bee-Keepers' Association of New South Wales, and refers to Mr. J. W. Pender, who was elected in Chicago last year. The other is from Mr. George de Layens, of Paris, France, elected at the Washington meeting. In each instance cordial thanks were returned for the honor bestowed.

FRANK BENTON, *Sec.*

Treasurer's Report.

Cash on hand from last meeting.	$127 33
Copies of Report sold	1 25
Twenty membership fees received up to Oct. 10.	20 00
Total	$148 58

DISBURSEMENTS.

Printing and mailing Report of 1893	$57 50
Printing Notices, Cards, etc., for St. Joseph Convention	31 00
Total	$88 50
Balance on hand Oct. 9, 1894	$60 08

GEORGE W. YORK, Treas.

On motion this report was referred to an auditing committee, and the latter reported near the close of the convention. Messrs. W. Z. Hutchinson, C. P. Dadant and E. Whitcomb were this committee.

Pres. Abbott then introduced Major Hartwig, ex-Mayor of St. Joseph, and President of the Commercial Club, through whose courtesy the elegant assembly rooms had been placed at the disposal of the society. In very appropriate words Major Hartwig expressed his great satisfaction at meeting such a representative body of North American bee-keepers, and also his pride and pleasure in extending to its members the hearty hospitality not alone of the Club rooms, but of the commercial interests of St. Joseph in general. His welcome was cordial, and elicited hearty applause from all present.

Dr. Miller replied in a very appropriate manner on behalf of the Association.

Pres. Abbott—The next item on the program is an essay on "Bee-Keeping in Germany," by Mr. C. J. H. Gravenhorst, of Wilsnack, Prussia, translated by Mr. Benton.

Frank Benton—It will be remembered that Mr. Gravenhorst is an honorary member of this Association, having been elected at the Washington meeting, and is a man of long experience in bee-keeping matters, one of the leaders in Germany, and a very practical writer, being the author of an excellent text-book on this subject. He was educated for a teacher, but his hearing having become impaired, he was obliged to seek some other occupation, and this he found in the keeping of bees.

The following is Mr. Gravenhorst's essay, which was then read by the Secretary:

Apiculture in Germany.

It is with pleasure that I accede to the request to prepare an article for the convention in St. Joseph, Mo., and I willingly select, of course, the subject which has been suggested as one about which information is desired. Although this subject is such a prolific one that I might write volumes on it, I will nevertheless make my article as brief as possible.

The keeping of bees in Germany is very old. Records which show this reach back 400 years before the Christian era. The bold mariner Pytheas of Massilia (Marseilles), a cotemporary of Alexander the Great, records in history that on the north coast of Germania on the banks of the River Ems, he had found honey used in the preparation of mead. Junius states that before the battle of Arbalo against the Cherusker (11 B. C.), a large swarm of bees settled on the cord and shaft of a lance in front of the tent of the camp-perfect, Hostilius Rutilus, in the camp of Drusus. Moreover, Peinius records the finding in north Germany of a honey-comb eight feet long taken from a log hive, that is, a hive hewn out of a tree trunk. He tells how the old Germans followed the keeping of bees in the forests and in gardens, in living trees in which a lodgment for the bees was hewn out, or in hives which they had cut from the trees and placed near their dwellings. Especially the Slavic laws prove that already in the fifth century of the Christian era, covered as well as uncovered bee-houses existed.

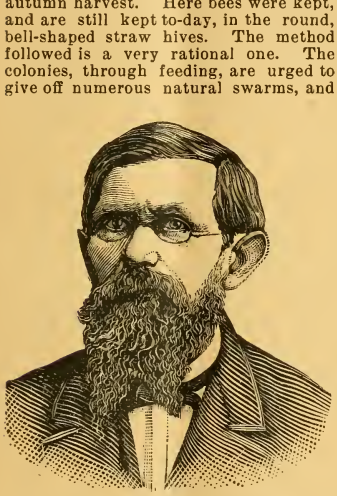
The greatest development which apiculture has ever had in Germany occurred in the so-called middle ages. This began, however, with the introduction of Christianity, from which time on the consumption of wax in the shape of candles and tapers constantly increased. The information which has become available to us through the writings left by monasteries and churches proves through the records of taxes for honey and wax which had to be met annually by the peasants, that bee-keeping yielded enormous returns. Thus it came about in the middle ages that the trade in honey, wax and mead reached its highest prosperity. Great quantities of the products of bee-keeping were exported by way of Hamburg and other seaports to Spain, Constantinople, Syria and Palestine. This flourishing of apiculture was greatly aided by the great attention paid to it by princes and owners of large estates. The so-called zeidler societies were founded. These were composed of those who were engaged in the care of bees, and also such as were engaged in collecting and straining honey and clarifying wax, and were called *Zeidler*.

These zeidler societies formed closely allied branch associations, which were given special rights and privileges. The strictest laws protected them. Only skilful bee-keepers were accepted as members. They elected judges (Starosten) and elders from their own number. The forests were divided off into districts, and each district was under a zeidler, while several districts formed a society, which in most instances managed large numbers of colonies. The Upper Lusatian Zeidler society, for example, had 7,000 colonies. The zeidler system was especially flourishing in the Mark of Brandenburg. It was developed on a similarly extensive scale in the so-called royal apiaries in the Bavarian forests in the vicinity of Nuremberg. In the year 1538 the value of two colonies was the same as that of a cow.

But, unfortunately, from this time on, apiculture in Germany went down hill at a great rate. On account of the Reformations the price of wax decreased greatly, for the glittering lights in most of the churches were extinguished. But what contributed most to the downfall of apiculture in Germany was the fearful thirty years' war which raged on account of religion, after the close of which, in 1648, three-fourths of the inhabitants of Germany and 80 per cent. of the cattle had been destroyed, and one-third of the cultivated lands laid waste. Only gradually, very slowly, people thought of apiculture again. During this time conditions had also greatly changed. People had learned to replace wax with substitutes, and honey with cane and beet sugar, syrup, etc.; the mead breweries which had cost so much had disappeared, the forests had been decimated, and, through intensive culture, many of the honey-producing weeds exterminated. The belief that bee-keeping was no longer profitable gained ground constantly. To awaken even a degree of interest in it again required great and persistent efforts. In this men like Nikol Jacob in Silesia, Schirach in Saxony, who first practiced the artificial increase of colonies, Riem, Spitzner and Christ were notable. Christ invented the magazine hive which constisted of several boxes placed one upon another.

After the thirty years' war apiculture

made exceptional progress on the north German plains, as for example, at the mouths of the Ems, the Weser and the Elbe, and especially in that portion which to-day is included in the province of Hanover, and the adjoining lands, where endless areas, covered with *Erica vulgaris*, and, here and there buckwheat, offered to the bees a good autumn harvest. Here bees were kept, and are still kept to-day, in the round, bell-shaped straw hives. The method followed is a very rational one. The colonies, through feeding, are urged to give off numerous natural swarms, and



C. J. H. GRAVENHORST.

if, for example, 50 colonies increase to 150, of these 100 are sulphured in the fall. In good years for honey these yield about 3,700 pounds of honey and 50 pounds of wax. These returns are obtained mainly by following the migratory system. Even though in many other localities in Germany bees were kept in straw hives, this is of little moment. Box and log hives have nearly disappeared. Housing bees in living trees is no longer followed.

Apiculture in Germany did not again receive a general impulse until Dr. Dzierzon came forward in 1847 with his invention of the movable-comb hive, which appeared in the bee-journal founded in Eichstaedt, Bavaria, established not long before this by Andreas Schmidt. At first he had powerful opponents, among whom was Von Berlepsch. But when the latter, with bag and baggage, went over into Dzierzon's camp, and other prominent bee-keepers followed him, the new system gained ground constantly, especially after the invention of comb foundation and that of the honey extractor were added, and the itinerant convention of the German and Austro-Hungarian bee-keepers came into existence. The first one of these conventions was held in Arnstadt in 1850, and the 39th in September of this year in Vienna. These conventions are always accompanied by apiarian exhibitions. The apiarian societies which are scattered all over Germany have had the greatest influence upon the spread and elevation of apiculture. We have in the first place the separate societies, which are made up of members of a given locality. These societies meet monthly, half-yearly or yearly. A number of these societies form, in the several lands or provinces of a State, so-called central associations. Nearly all of the central associations, that of the kingdoms of Bavaria and Wurtemberg excepted, have banded themselves together to form a German Central Association, which thus numbers about 20,000 to 30,000 members. The German Central Association, by the side of the German-Austro-Hungarian Itinerant Association, but independently, holds every two years a great convention, with an exhibition. The last one was held in 1893, in Heidelberg. All of the separate central associations receive subventions from the State. The Mark Association, for example, to which I belong, and which is composed of 83 separate individual societies, having about 1,680 members, receives yearly about $300. Other societies receive more, and others less.

Every member of an association receives at a reduced rate, the official organ of the society. The Hannoverian "Centralblatt," organ of the Hanover Central Association, is most widely distributed among the members of societies, the editions being 13,000 numbers. It appears monthly, and costs to members of the society 24 cents yearly. In addition to these official organs, numerous other bee-journals are published. Besides these journals—there are about 16 of them—besides the multitude of other apiarian publications which are poured forth annually, and aside from the activity of the societies, the so-called bee-keepers' schools work for the elevation of apiculture, as, for example, the bee-keepers' school under the protectorate of the Archduchess of Baden, which is located at Eberbach on the Neckar, where several courses are given every summer, many ladies also attending; and also the

bee-keepers' school of Pastor Weygandt. Notwithstanding all these extraordinary exertions, the elevation of apiculture in Germany proceeds only slowly. Indeed, it has even gone backwards in the last 20 years, but is now on the increase, especially the method with movable combs. In the year 1883 the number of colonies of bees was 1,911,797, so that there were 3.5 hives per square kilometer, and for every 100 inhabitants 4.2 hives. Of these 19.3 per cent. were movable-comb hives. According the last census, in 1892, there were 2,034,479 colonies, that is, 3.8 hives per square kilometer, or for each 100 inhabitants 4.1 hives, 31.3 per cent. of which were movable-comb hives. Unfortunately, no exact figures concerning the honey-yield of these colonies are at my command, but it may be fairly estimated that in what are called good honey years, the honey harvest reaches 82,000,000 pounds, and the wax harvest 1,000,000 pounds.

It should be noted here that in Germany little comb honey is produced, there being for the greater part no market for it. From the hives with fixed combs the best honey that is obtained is what is called "run honey," and it approaches extracted honey very nearly in quality. The crushed combs are placed in a seive or a trough, and the honey permitted to run off. What remains is gently heated and strained. Extracted honey and run honey are sold on the average for 25 cents per pound, the strained honey 12 to 13 cents per pound. Comb honey and extracted are *the same in price.* The honey is gathered chiefly from fruit-bloom, rape, esparcette, acacia or honey-locust, linden, corn flower, buckwheat and heather.

So far as the hives are concerned in which bees are kept in Germany, the bell-shaped straw hives are most widely used, the few log or box hives, or other hives with immovable combs are not worth consideration. The confusion in the construction of hives with movable combs is infinitely greater in Germany than in America. The great majority of these hives are built cupboard-like, with several stories one above another, which open at the sides where the gables are placed, or from the back end. The frames in these hives, quite in contrast to those in American hives, are placed with the longer dimension perpendicular. The full-sized German standard frame does not differ greatly as regards its contents from the Langstroth frame. American hives have been but little introduced, or not at all here. Among the German hives most preferred are the Dzierzon twin hive the Berlepsch hive, the four-story upright hives, the Dathe hive, the Albert leaf hive, and the hive which I use, the Bogenstueiper.

Whether, notwithstanding the great exertions which are constantly being made for the elevation and spread of apiculture in Germany, it will ever be brought up to the point it reached in the 13th, 14th and 15th centuries of our era, is still a great question. The many flowers growing wild in those times have disappeared because of improved methods in the management of meadows, forests and fields. But in return many other honey-producing plants have become naturalized with us, so that the lack has been made good again. We Germans entertain the hope that constant progress will mark the course of apiculture, and this so much the more since we can profit by the valuable investigations of bee-keepers in other lands, and not the least among these are to be counted those of our brother bee-keepers in America, who so nobly stand far in the lead in progressive apiculture. God grant it. With this sincere wish, and with hearty greetings from Germany, I present to the honorable body of North American bee-keepers, my profound respects as one of your honorary members. C. J. H. GRAVENHORST.

Pres. Abbott—Mr. Gravenhorst's essay is now before you for discussion.

Mr. Richardson—Do I understand that the use of the movable-comb hives in Germany is on the decrease?

Mr. Benton—No. On the contrary, they are using movable-comb hives more extensively. In 1883 the percentage being 19 3/10, or about 1/5, and in 1892 the percentage was 31 3/10, or almost ⅓.

Mr. Benton—As a member of this society, I wish to move that a vote of thanks be extended to Mr. Gravenhorst for his valuable essay. Seconded and carried unanimously.

Dr. Miller here moved that a committee be appointed to whom should be referred all of the foreign essays, and that the committee report to this Association any points in them which they think proper for discussion, without having them read before the Association.

Pres. Abbott—I feel as if I ought to make the first speech on that subject. I asked for these essays myself, and I expected they—every one of them—would be of great interest to this Association,

and the men who wrote them have evidently gone to a great deal of trouble, as the present essay would indicate. Now, then, to place in the hands of three people, after these gentlemen took the pains to write them, I think it would be a serious mistake. The assumption is that the committee on program, being made up of the President, Vice-President, Secretary and Treasurer, would have sufficient intelligence what men to select to write essays which should be read before this Association, and I hope the Association will vote that down at once, and not allow any such thing to be done. This Association cannot afford to scratch out a single line. If the essays that follow are of the character of this one just read, we cannot spend our time better than to listen to the reading of them. I do hope seriously that this Association won't do anything of the kind, but will take it for granted that the people who solicited these essays were careful not to solicit essays that would not be proper to bring before this Association. I feel seriously about this thing, and I think we are going to make a mistake if we pass this resolution.

Mr. Richardson—I second that. I do not think it would be right to ask these men to write these essays and then put a committee over them to tell me what I want to hear and what I don't want to hear.

Mr. Holtermann—It is quite a customary thing to appoint a committee to take up the essays after they have been read, and if there is anything in them to bring forth a discussion, to bring it out.

Dr. Miller—I want to say to you as I said before, it is not a new thing to me. In an agricultural society in our State it has the same kind of a committee appointed, and I want to say this: I seconded the motion and I voted to return thanks to Mr. Gravenhorst, and I know he deserves the hearty thanks of these people here for his valuable essay, but I want to say to you I do not think that it is profitable for us to take time here to spend on these essays that we can read just as well at home. Here is a very interesting essay, and I would be interested in it as much as any one in the room, and I would like to sit down and read it at home, but there is nothing in it which we want to discuss here, and if we are to measure the rest by what we have received there would be something like two hours taken up in listening to essays which we could just as well read at home. I think if a committee is appointed they will pick out the practical points, and then have these essays printed. But if you think it is profitable for us to discuss them when we have come here long distances, and if they contain practical things for us to discuss here, let us have them. I am not doing it with any thought of censuring the program committee in making their choice; but if it is the profitable thing for us to have essays read, I will sit here and listen to them, but I do think there are things that belong to a convention that don't belong elsewhere. We came here to discuss points that we cannot have the opportunity to discuss through the bee-papers. I certainly want the brothers to feel that it is only with the heartiest respect, and only with the utmost kindness, that I say these things.

Mr. Root—All I will add is to give my opinion. As the President has requested the people to furnish the essays, we should read them, if only out of respect for our President. That is my opinion in regard to the matter.

Mr. Richardson—You don't appear to catch my meaning. You propose to put a committee on here to say what is interesting to me and what is not. You might put on a committee that might reject a point that I had come here to learn about. You may have learned all about these things 50 or 30 years ago, and it may be what I have come here to find out about.

The motion made by Dr. Miller was lost by a nearly unanimous vote, whereupon the discussion of the essay was resumed.

(To be continued.)

Old Bee Journals.—We have quite a number of old copies of the "American Bee Journal," extending back perphaps 10 years. We will send these out at *one cent a copy*, all to be different dates, and back of Jan. 1, 1894. Remember they are *odd* numbers, and you must let us select them. We cannot furnish them in regular order, that is, one or two months' numbers without a break, but will mail you as many single or odd copies as you may wish, upon receipt of the number of cents you want to invest in them. They will be fine reading for the long winter evenings, and many a single copy is worth a whole years' subscription. Better send for ten or more copies, as a sample order. Only a cent a copy, *back* of Jan. 1, 1894.

Read our great offer on page 702.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees Rolled in the Honey.

It was very dry here the past summer. I had to feed one of my colonies in June, but after the basswood flow began it was a delight to see them roll in the honey. I got 700 pounds in one-pound sections, and 200 pounds of extracted honey from 3 colonies, spring count, and increased to 10 colonies

I like the "Bee Journal" very much.

PETER J. KLEIN.

Greenwood, Wis., Nov. 16.

Bees in Good Condition for Winter.

Bees that survived last winter gathered very little honey here this year, but what are living now are in good condition for winter, with plenty of stores. Mine are on the summer stands, with about 30 pounds of honey to the colony.

Give us more of the "St Jo." convention through the "Old Reliable." We fellows that could not go, like to read about it. R. H. HUMPHRIES.

Galatia, Ill., Nov. 12.

Trade Ruined by Sugar-Honey.

I would like to caution against feeding sugar syrup to produce honey. Two years ago a bee-keeper who lives about four miles from me tried this on quite a large scale, and a large lot of sugar-honey, both comb and extracted, and sold large quantities of it to his own customers and to a good many of mine. The result was, that he ruined his own trade and nearly did the same to mine around home, and I had a very large home trade. Most of the people seemed to be able to tell that it was sugar-honey, and some of his neighbors had seen him feed sugar in large quantities during the summer, and a very big fuss was made over the matter. The local newspapers took the matter up, and two or three articles about it were copied by other local papers.

Now, I have never sold a pound of sugar-honey, but a good many people knew that I fed a great deal of sugar every fall, for winter stores for the bees, and I was thought by most people, or at least a good many, to be as bad as my neighbor. I explained matters the best I could to my customers, and I am getting some of my home trade back, but it is slow, hard work. C. DAVENPORT.

Chatfield, Minn.

Blooming Flowers and Growing Grass.

The weather here is just delightful. We have not had any frost yet. The gardens are full of flowers of all kinds. I do not remember seeing such a profusion of flowers in our gardens at this time of the year. The grass that started about the first of October is now about six inches high. It is not every year that we have such fine grass as we have at this time. W. A. PRYAL.

North Temescal, Calif., Nov. 12.

Poor Year—A Late Strawberry.

I see in the "Bee Journal" the announcement of a bee-convention to be held at Middlebury, Vt., Jan. 30 and 31. It is only about 20 miles from here, and as I never have attended any bee-convention I intend to go and get acquainted with some of my brother bee-keepers. I have about 75 colonies. They did not do extra well this year. I got only about 1,000 one-pound sections of honey this year, as it was a pretty poor year here. But I am hoping, if we have a good year next year, and with the help of the "American Bee Journal," that I may get good returns from the bees.

I saw in the number of the "American Bee Journal" for Nov. 8, that dandelions were in bloom in Chicago on Oct. 31. Mr. D. W. L. Moore, here in Ticonderoga, N. Y., picked a ripe strawberry in his garden on Nov. 13, that measured nearly three inches. Mr. Moore sent the berry to his mother in New York city. G. H. ADKINS.

Street Road, N. Y., Nov. 16.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Colo.

WASHINGTON.—The next meeting of the Western Washington Bee-Keepers' Association will be held on Dec. 10, 1894, in Tacoma.
Tacoma, Wash. G. D. LITTOOY, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers Association will meet at the Court House in Charlotte, N. C., on Dec. 6, 1894, at 11 o'clock a.m. A full attendance is desired.
Steel Creek, N. C. A. L. BEACH, Sec.

ONTARIO, CANADA.—The annual meeting of the Ontario Bee-Keepers' Association will be held at Stratford, Jan. 22, 23 and 24, 1895. All bee-keepers are cordially invited to attend. W. COUSE, Sec.
Streetsville, Ont.

CALIFORNIA.—The next regular meeting of the Central California Bee-Keepers' Association will be held on the first Wednesday in December, at Hanford, Calif. You are cordially invited to attend.
Lemoore, Calif. J. F. FLORY, Sec.

PENNSYLVANIA,—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. PIZER, Sec.
Franklin, Pa.

ILLINOIS.—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend. B. KENNEDY, Sec.
New Milford, Ill.

MICHIGAN.—The Michigan State Bee-Keepers' Association will hold its annual meeting Wednesday and Thursday, Jan. 2 and 3, 1895, in the city of Detroit, at the Perkins Hotel, cor. of Cass and Grand River Avenues. Rates, $1.25 and $1.50 per day. The former rate if two occupy one room. This will be at a time when railroad rates will probably be one-half fare. W. Z. HUTCHINSON, Sec.
Flint, Mich.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1⅓ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.
Indianapolis, Ind.

NEBRASKA.—The winter meeting of the Nebraska State Bee-Keepers' Association will be held at Auburn, Nebr., on Tuesday and Wednesday, Dec. 4 and 5, 1894. All persons interested in apiculture, living between the Atlantic and Pacific Oceans, are invited to be present at that time and place. This has been a close year, for the bee-keeper as well as the banker, or merchant, but we do not propose to "cry quits" so long as bees continue to gather their own living and something for us. Then let all our bee-friends come together and compare methods of the past and their results, and thus learn better how to succeed in the future. Never look too long on the black side of a picture. Brother bee-keepers, come one—come all! L. D. STILSON, Sec.
York, Nebr.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

RUDY'S PILE SUPPOSITORY

Is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and free Sample to MARTIN RUDY, Registered Pharmacist, Lancaster, Pa. NO POSTALS ANSWERED. For sale by all first-class druggists everywhere. Peter Van Schaack & Sons, Robt. Stevenson & Co., Morrison, Plummer & Co., and Lord, Owen & Co., Wholesale Agents, Chicago, Ills.
Pease mention the Bee Journal. Nov15

Two Bound Volumes of the "American Bee Journal" for 1891 we have for sale, by express, for $2.00, or by mail for $2.30. They are bound in good, board covers with leather backs, gilt-lettered. The first one who sends the price, will have the books.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.
J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.
F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN. 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & CO., 128 Franklin St.

Kansas City, Mo.
HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 423 Walnut St.

Albany, N. Y.
H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.
BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.
CHAS. DADANT & SON.

Cincinnati, Ohio.
C. F. MUTH & SON, cor. Freeman & Central avs.

Have You Read page 702 yet?

Honey & Beeswax Market Quotations

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 6@7c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27@28c.
R. A. B & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are not quite as salable; and 2-pound sections are little called for. We quote as follows: 1-pound fancy clover, 13@14c.; 2-pound, 12½@13c.; 1-pound white, 12@12½c.; 2-pound, 12c.; 1-pound fair, 10@11c.; 2-pound, 10@11c.; 1-pound buckwheat, 10@11c.; 2-pound, 9@10c. Extracted, clover and basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 50@60c. per gallon. Beeswax, scarce and in good demand at 29@30c. C. I. & B.

CINCINNATI, O., Nov. 19.—Demand is good for choice white comb honey at 14@16c. Extracted is in fair demand at 4@7c., with a fair supply.
Beeswax is in good demand at 22@27c. for good to choice yellow. Supply scant.
C. F. M. & S.

KANSAS CITY, Mo., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat, 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6½c.; buckwheat, 5½@6c. Beeswax, 27@29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

KANSAS CITY, Mo., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Nov. 24.—The receipts of comb honey have been very large and exceed those of former years by far. The demand has not been very active of late and there are no signs of improvement. The supply is accumulating and the prices show a downward tendency. We quote: Fancy white, 1-lbs., 13@14c.; fair white, 11@12c.; buckwheat, 10c. Two-pound sections are in very light demand and sell at from 1@2c. a pound less. The market on extracted is quiet, with plenty of supply of all kinds. We quote: White clover and basswood, 6c.; Southern, 50@55c. per gal. Beeswax is firm and in good demand at 30@31c. H. B. & S.

CHICAGO, ILL., Nov. 27.—Up to the present the sales on honey have met with our expectations. We have received considerably more honey than we figured on handling, owing to the short crop report, and we think the early shippers reaped the benefit. However, we are now getting the average price, viz.: Fancy, 15c.; white, No. 1, 14@13c. Extracted, 6@7c.
Beeswax, 28@29c. J. A. L.

Profitable Bee-Keeping, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, possibly each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

Advertisements.

HONEY FOR SALE.

We have some **NICE Comb Honey,** put up in 24-Section Cases, weighing about 21 lbs. each, sections well filled; for sale at 13c. lb.
Circular of Supplies on application.

I. J. STRINGHAM,
105 Park Place. NEW YORK, N. Y.
Mention the American Bee Journal.

THROW AWAY CURRY COMB AND BRUSH!
And buy a

Burlington "Stay-On"
STABLE BLANKET.

Your Horse is always clean, it keeps the Hair smooth and glossy. No surcingle required. No tight girth. No sore backs. No chafing of mane. No rubbing of tail. No horse can wear them under his feet. **NO COME OFF TO THEM.**

We confine our Sales to Jobbers only.

But! IF YOUR DEALERS DO NOT KEEP THEM We will, in order to convince you of the superiority of the **Burlington "STAY ON"** over all imitations and old style blankets, send only one blanket to any address, express paid on receipt of price. (Write for Catalogue and Prices.)

BURLINGTON BLANKET CO., BURLINGTON, WIS.

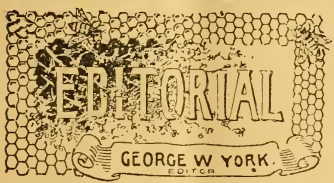
ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. | DEVOTED EXCLUSIVELY TO BEE-CULTURE. | Sample Copy Free.

VOL. XXXIV. CHICAGO, ILL., DEC. 6, 1894. NO. 23.



Prof. Cook, writing from Claremont, Calif., Nov. 20, says this:

We are having lovely weather. My bees have gathered quite a little honey this fall—mostly from the pepper-trees. This is a lovely country. A. J. COOK.

A Tremendous Honey-Yield.—"Gleanings" tells us of an Australian bee-keeper who, in the season of 1891-92, "started in spring with 63 colonies, increased to 120, and extracted a little over 48,000 pounds of honey—an average of 750 pounds, spring count." The bees were "Italians and hybrids, in 20-frame 'long-idea' hives." But the honey season in Australia lasts almost a whole year. It's a fine yield, just the same.

The Amateur Bee-Keeper is the name of a neat 64-page pamphlet, 4x7 inches in size. It is written by that practical Missouri bee-keeper, Mr. J. W. Rouse, and published by the Leahy Mfg. Co. It should be read by every bee-keeper, whether an amateur or not. A new and second edition has just been issued, the first 1,000 copies being disposed of in only two years. It is nicely and fully illustrated. Price, post-paid, 25 cents; or clubbed with the "American Bee Journal" for a year—both, $1.15.

Nebraska Apiarian Exhibit, at the State Fair in September, was as usual a prominent feature of the annual show. Mr. E. Whitcomb was in charge, which, of course, from the very start, insured a successful exhibit. A Nebraska report of the Fair said that the apiary department was ornamented this year by some beautiful work in beeswax by Mrs. Whitcomb. One of the most handsome designs consisted of a lyre with a bunch of flowers at the base. She exhibited a basket of wax flowers, flowers made of birds' eggs, statuary and other pieces nicely executed.

William James, of Pleasant Hill, showed a miniature house made by bees on a frame-work placed in the hive.

Ernest Bessey and Winnie Stilson exhibited large collections of honey-producing plants.

August Davidson, of Omaha, S. A. Smith, of Gage county, Stilson & Son, of York, and Superintendent Whitcomb, all had large exhibits, considering the unfavorable season for honey-producing in that State

Lots of Honey will be consumed by Chicago people the coming winter. There are quite a number of bee-keeping honey-sellers in town now, and they all know how to dispose of honey. Mr. Byron Walker, the "tall sycamore" bee-man of Michigan, came last week, and he will put thousands of pounds of nice honey in the grocery stores.

Then we understand that Mr. F. Grabbe—once a part owner of the "American Bee Journal"—has opened a store on the west side of the city, and is wholesaling honey at a fair price.

Mr. H. F. Moore is here—a young lawyer who thought he'd leave the old Ohio farm

eome six years ago, and try his hand at city life. Well, he has practically put himself through a Chicago law school by selling honey. He has sold at retail as high as $21 worth to a single wealthy family. He finds no difficulty in getting 75 cents for a Mason quart jar of honey.

Now, why cannot other cities and towns be worked in the same way? We believe they can. They ought to be, for city people are longing for good honey, and beekeepers themselves are the ones that should supply it.

Mr. Walker's own crop this year amounted to over 20,000 pounds, from 350 colonies in seven different yards. He has not failed to get a good crop of honey in 18 years. And every fall we look for him in Chicago to sell his honey himself, just as much as we expect to see the birds on their annual flight to the summerland of the South.

There's money in pure honey, but it needs to be gotten out by personal hard work. Try it and see for yourself.

Hasty and the Kissing Habit.—The hints on kissing, given by Dr. Peiro, on page 364, seem to have aroused Bro. Hasty, for in the October "Review" he comments thus on the subject:

Mercy, doesn't Dr. Peiro, of the "American Bee Journal," go for the kissing habit! Sets his face against it, as it were. Had we only plenty of Dr. Peiros an anti-kissing reform would sweep over the country equal to that which in some former age must have swept over Japan. There it is a very rare thing for a mother to kiss her own babe. Who knows but what the Prohikissem party is already being organized in secret? To arms! to arms!! it's a coming. "I know not what course others may take, but as for me, give——" no—let her come.

That Young Editor in the office of "Gleanings" is beginning to "call names." Yes, sir, it's a fact. "Ernest" called us "a punster" right in print! He did, "by George!" and we're going to tell his pa, if he don't quit calling us names. So we will, the big, overgrown Root-let, that he is!

That Beeville Bee-Meeting—don't forget it. Dec. 27 and 28 is the time. Mrs. Atchley's home is the place—Beeville, Bee Co., Tex. Better go if you can. Big preparations are being made. A good and profitable time is sure to result.

Smoker Fuel—Robber Bees.—Mr. E. France, of Platteville, Wis., in "Gleanings" for Nov. 1, says this about fuel for smokers, and how he stops robbing among bees:

After trying about all the different kinds recommended, we have settled down to straw and tobacco-stems—about half of each. We get the tobacco-stems at the cigar-factories. They cost nothing—in fact, we haul them on the place for fertilizers. The factory men are glad to have them taken away. Straw and tobacco-stems make plenty of smoke, hold fire well, and the tobabcco just takes the fight right out of the bees.

We have never failed to stop the worst case of robbing we ever had, providing the colony being robbed was strong enough to be worth saving. This fall, in taking off the three stories one morning, I worked a little too long; and as I smoked the bees down with tobacco, I got one colony pretty drunk. Like other drunken beasts they could not defend themselves. It happened that I went to town after working with the bees, and was gone two hours. When I got home the yard was terribly excited, all trying to find where the honey was. The bees were swarming about one quadruple hive, and were tearing away at three of the colonies in the hive just as fast as they could get in and out.

In a case of that kind, something must be done, and done quickly, if we save the colonies that are being robbed. I had a large asparagus-bed. I took my scythe and cut a couple of armfuls and banked up the hive-entrance with the tops, and then took a sprinkler and wet the tops of the asparagus with cold water, and kept it wet for an hour. By that time the robbers had quit trying to get in. I left them banked up for another hour, and then took away the asparagus-tops. Then the robbing was done, and the robbers never offered to trouble them again. I examined the robbed colonies about sundown the next day, and found that fully half of their honey had been taken out of their combs, so I exchanged their honey-combs for full ones, and now they are all right.

I have fought robbers in this way a good many times, and always with success. They cannot get in through wet stuff. The bees belonging there think it is a wet time, and stay at home. In the spring, before we get the asparagus-tops, I use straw. It is not so good, but will do.

One Enemy is just one too many. But it is always preferable to stand up for the right all alone, than to step down to the wrong with the majority.

A B C of Bee-Culture—just see the magnificent offers on page 707. Every one of our subscribers can now have a copy of that splendid book.

Two Queens in a Hive.—We have received from several of our good friends and subscribers a clipping which was originally published in a London newspaper, giving an account of two queen-bees keeping house *together* during an apiarian exhibition in Vienna, Austria. It seems that Bro. Root's attention has also been called to the statement about the two queens, for in "Gleanings" we find this about it:

The statement is going the rounds of the press, as though it were something positively wonderful, and never before heard of, to the effect that two queens were *actually* living together in harmony, in an observatory hive on exhibition at an apicultural show in Vienna, and that thousands of visitors can attest the proof of it. We don't doubt it at all. This same clipping desires bee-journals to take particular notice of it. Of course, our readers know that it is not an extraordinary thing to find two queens in a hive, both performing their regular duties.

But it's not surprising that the uninitiated public should be surprised about such things. Why, just a few weeks ago, a city gentleman called on us, and wanted to get some one-pound sections, saying that a bee-keeping friend of his in the country wanted to take off some honey and put it into the "little boxes!" He thought that the honey was cut out of the hive and then put into the sections! When we explained how things are done by the practical bee-keeper, he said: "Well, that shows how little I know about bees!"

The St. Joseph, Mo., "Herald" also copied the wonderful (!) article in question, and it came under the notice of Emerson T. Abbott, the President of the North American Bee-Keepers' Association, who, as all know, lives in St. Joseph. He took the trouble to reply to it in the same paper, on Nov. 16, and here is a portion of his remarks:

The discovery is that Prof. Gatter, of Simmering, exhibited a "thriving hive the members of which are governed conjointly by two queens," and that the "two monarchs get along most satisfactorily."

The writer further states that the "members of the Vienna Apicultural Society are proud to think that no such extraordinary spectacle as this was ever witnessed (?) or recorded in the history of bees." And to make the matter more sensational, and to give color to the statement, we are told that the eminent apiarist, Dr. Dzierzon, "sat for hours at a stretch watching the two queens."

It is too bad to make the old man spend so much time watching a very ordinary affair.

As the article is credited to a London paper, it is to be assumed that this would-be sensational scribbler lives under a monarchial government, and on this ground may be excused for dealing so lavishly in phrases which are peculiar to such a government.

There is no such government, however, in a bee-hive. The queen, so-called, is not a queen at all in the sense that she rules the hive. She is simply the mother-bee, and her principal duty is to lay eggs. She does this work to perfection, as she sometimes lays 2,000 or 3,000 eggs a day during the time honey is coming in rapidly.

Every man who has any practical knowledge of the economy of the bee-hive knows there is no such thing as government in it. The truth of the matter is, the bees do not need any boss, as every bee has a mind to work, and each bee knows her business, and does it without any whining. Men might learn a lesson from the bees in this respect. There is more reason for believing that the so-called "queen" is subject to the will of the worker-bees than there is for thinking that she has anything to do with the government of the colony. A monarchist will find no support for his theory in a bee-hive. Neither is there anything strange about finding two queens in a hive, as this frequently occurs under certain conditions, and the fact has been witnessed and stated a great many times before this fruitful writer with a very vivid imagination spread it broadcast in the world.

I hope you will excuse me for taking so much of your space. My only excuse for so doing is, that I think it better for those who may not have the opportunity of knowing the truth to have the facts plainly stated by one who from actual experience should know them.

EMERSON T. ABBOTT.

☞ The food fed to all larvæ, up to the time they are 36 hours old, is exactly the same, whether the larvæ are designated for drones, queens, or workers.—*Doolittle.*

Remarkable Fall for Bees.—Mr. B. Taylor, of Forestville, Minn., who conducts the apiarian department in the "Farm, Stock and Home," had the following in the number of that paper for Nov. 15:

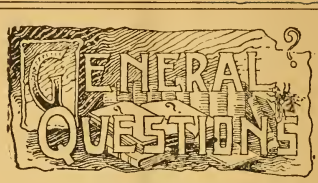
In our 39 years of bee-keeping in Minnesota, we have never known a year in which the bees worked so late in the fall as this. One fall, 20 years or more ago, the bees gathered considerable honey in the first week of October. We had taken all the supers for surplus off, except on a few hives, and we were called from home a week, and on returning was surprised to find that there had been a nice lot of honey stored in the few supers that remained

upon the hives. We resolved to watch for October flows thereafter, and not lose the honey again through neglect. But no legitimate work has been done again until this fall. At the Forestville apiary, our bees have been bringing in pollen freely on all fine days. Up to Oct. 26 dandelions were the source from which it came, many meadows in this vicinity being yellow with the blossoms. The consequence has been that brood-rearing has been kept up unusually late, and the hives being heavy with honey, we regard the colonies as being in the best condition for safe wintering that they have been in for years.

We feared that the white clover was mostly killed out by last summer's terrible drouth, and that the outlook for next year was anything but promising, but in this again we are most pleasantly disappointed. The high temperature and timely showers have started the seemingly dead clover in fine shape, and the pastures are greener now than at any time in our recollection. This promises well for the honey crop of 1895, and every bee-keeper should take especial care of each colony, so that we may all rejoice together over a big honey crop next season. The saying that all rules have their exceptions has had a new illustration with us this season—we extract unfinished sections to get the empty combs for next season's use. In the past we have cured such sections the same as comb honey before extracting, in order that the extracted honey might have all the oily richness of comb honey, but this fall we found it nearly impossible to extract sections so cured.

This dry summer had made an exception to the common rule, the honey had become almost like wax, and we were compelled to melt a share of our combs, as it was impossible to throw the honey out without tearing them to pieces. This was a great loss, as prepared combs are the great means of increasing the white honey crop, and we have proved that a section filled with empty comb, if properly prepared and used, is worth more than half the value of finished sections.

We also run an out-yard of 40 colonies this year for extracting; the colonies were tiered up to give plenty of storage room, and no supers were taken off until after Oct. 1. The yield was fair, but neither would this honey extract, even after we had steamed the combs until they were so soft as to part from the top-bars. In order to get enough honey to pay expenses and keep things running until another year, we had to melt the combs in a steam box, and destroy a large quantity of our fine extracting-combs. We have a quantity of the filled supers that we shall put in a warm room and keep for feeding next spring, but using 15-cent white honey for feeding, when we could supply equally good sugar syrup for 5 cents is very poor policy. The lesson to be learned from all this work and loss is to watch on dry, hot seasons and not let the honey get so thick we cannot extract it.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Large Colony—Queen Mating.

On the 25th of March one of my neighbors found a basswood tree 4 feet in diameter, with a swarm of bees in, about 45 feet from the ground. They cut the tree down, and it fell upon several other small trees, mostly maple, and lodged about 5 feet before striking the ground; then the bees came out by thousands and took possession of the forest, until the next morning at daylight, when two men went with a cross-cut saw and sawed off about 4½ feet. They sawed too close to the bees on top, and cut away about 40 pounds of very nice white clover honey.

The cavity was 18 inches in diameter at the base, and 14 inches in diameter at the top. I saw the log hive, and think there were at least 50 quarts of bees, and 150 pounds of honey in the log hive. They were black bees, and tinctured with a little yellow. What were they worth? I offered the man $10 for them. Could I have afforded to give more?

How could they have been divided? Could a person have driven out about 8 quarts of bees with smoke on comb foundation, and make 5 or 6 good colonies, by buying good, fertile queens from the South, without destroying the original colony?

Why does the queen-bee come out in the open air to meet a drone, when there are drones in the same hive?

Caledonia, Wis. W. K.

ANSWERS.—A colony of 50 quarts of bees with 150 pounds of honey, or 190 pounds before the 40 pounds were cut away, is something rather unusual; $10

would be a low price for them. A little figuring will help us in deciding their value. In Root's "A B C of Bee-Culture," a quart of bees is estimated at about 3,200, and at that rate 50 quarts would be about 160,000. Bees are sold by the pound rather than by the quart, and at 5,000 to the pound, 160,000 would make 32 pounds. So early in the season a pound of bees ought to be easily worth a dollar, making 32 pounds worth $32. One hundred and fifty pounds of honey at 8 cents will bring $12. That makes bees and honey together bring $44.

So you see, if you paid only $10 for the contents of the log, and sold out at $44.00, you would have good pay for the trouble of getting out the honey and shipping the bees. It is quite possible, however, that there is some mistake in the estimate both of bees and honey.

On page 276 of the first volume of the "American Bee Journal," you will find that Dr. Donhoff shows that under the most favorable circumstances, even allowing a queen to lay 3,000 eggs every day continuously, the *maximum* population possible in one colony as the progeny of one queen is 63,000. But no such number as this could be expected to be present in spring.

I doubt the wisdom of your trying to divide as you propose. On the whole, perhaps you could adopt no better management than to leave the colony in the log till it sent out a swarm. Then if it is so very strong it will send out a second and perhaps a third swarm. 21 days after the issuing of the first swarm would be a good time to transfer the combs to a movable-frame hive. Other plans might be followed which will suggest themselves, if you read up thoroughly some standard text-book on bee-keeping.

With regard to the mating of the queen in the open air, possibly it may be sufficient to say that she is created with an instinct that impels her to do so. Several cases have been reported, at least in some of the foreign journals, in which it was asserted that mating took place in the hive. Even if there be no mistake in these cases, they must certainly be regarded as very exceptional.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Dec. 10.—W. Washington, at Tacoma.
G. D. Littooy, Sec., Tacoma. Wash.

Dec. 18, 19—Northern Illinois, at Rockford, Ill.
B. Kennedy, Sec., New Milford, Ill.

Dec. 26, 27.—Eastern Iowa, at Anamosa, Iowa
Frank Coverdale, Sec., Welton, Iowa.

Dec. 27, 28.—Texas State, at Beeville, Tex.
Mrs. Jennie Atchley, Beeville, Tex.

1895.

Jan. 2. 3.—Michigan State, at Detroit, Mich.
W. Z. Hutchinson, Sec., Flint, Mich.

Jan. 9.—Indiana State, at Indianapolis, Ind.
Walter S. Pouder, Pres., Indianapolis, Ind.

Jan. 21, 22 —Colorada State, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.

Jan. 22-24.—Ontario, at Stratford, Ont.
W. Couse, Sec., Streetville, Ont.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Jan. 30, 31.—Vermont, at Middlebury, Vt.
H. W. Scott, Sec., Barre, Vt.

Feb. 8, 9.—Wisconsin, at Madison. Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

——. ——.—North American, at Toronto, Can.
Frank Benton, Sec., U. S. Dept. Agriculture, Washington, D. C.

☞ **In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

North American Bee-Keepers' Association

OFFICERS FOR 1895.

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VICE-PRES.—L. D Stilson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson...Flint, Mich.
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CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 14.

(Continued from page 619.)

HOW TO GET ALL WHITE HONEY.

Now I will be glad if my Southern readers will pay strict attention to this lesson, *especially* how to get nice, clear, white comb honey.

First, I will say that we *must* have nice, clean sections, and use the best and thinnest foundation for starters. But the greatest trouble lies with those bee-keepers that do not study their honey-plants, and let their sections remain in the hives when red or undesirable honey is coming in, and the bees will have some dark honey along with the white, and all is spoiled. Now, if you have a crop of white honey during the season, you should know exactly the time, as near as possible, when to look for it. Have your bees in condition to gather it, and take all undesirable honey off, if there should be any, and have the supers ready to put on the moment the white honey begins to come in; and you can, if you like, use some dark sections for bait in the center of the super, then, when well started, take it out and put in new ones. But by all means, do not let your dark honey get mixed with the light. If you will do as I have directed, you will be pleased to find you can get white honey in the South as well as anywhere, and just as fine flavored honey.

I have had it intimated to me that comb honey in the South is too tender to ship, etc. Now, friends, I would not like to have you think this. I cannot see any difference in Northern and Southern honey as regards its shipping qualities. Of course, during the very warm weather here our honey is very tender, but any honey would be tender under the same conditions. But I assure you that you can produce and ship comb honey in the South as well as anywhere.

The greatest trouble we have here with comb honey is the moth. I am going to have made a wire-cloth honey-house, large enough to hold 20,000 pounds. I mean by a "wire-cloth house," that I will make the sides nearly all wire-cloth. Make it ant and moth proof.

And then, in this dry country, I notice that the moth does not bother combs that are well ventilated, like those shut up close. The wire-cloth sides will allow the wind to circulate freely through the house, and keep the dampness all out. I have some honey in a small wire-house now, and it is keeping all right.

I have always delighted in producing section honey since I first tried it, and I expect to produce and ship it in the future. I am anxious for Southern bee-keepers to put comb honey—fine section honey—on the markets of the world, and let people know we can produce something except "Southern strained honey." I tell you, friends, we of the South have been too careless about getting up our honey for market, and we must not sleep over our rights any longer, but let's go to work and produce comb honey by the carload, as we call it. Let's have all our white honey in the sections, and extract the darker grades, and I believe that if we will be up and doing, and try ourselves, we can add to our list fine comb honey by the carload.

The reason I have gone over these grounds so carefully, and repeated some words about it, is because we are away behind on section honey, and we should not be. Now some, or all of you, try some section honey this year, and see if you are not pleased.

SMOKING CAGED BEES AND QUEENS.

When queens are caged, and the bees with them show fight, and you wish to smoke them, better let the smoke pass over or through your fingers, especially if you use a direct-draft smoker, as you may burn the queen and bees to death in a twinkling. I have done the like, and to keep you from doing the same, I tell you how to avoid it, for if the smoke burns your fingers, you may know it will injure the bees. JENNIE ATCHLEY.

Some Questions About Texas.

MRS. ATCHLEY:—I am a bee-keeper, and having sold my place and apiary

here, and going to leave this part of the country, I take the liberty to ask you some questions about Texas.

In the first place, are people troubled with liver disease? I am troubled with it here, and want to get where I will not be. Is there any business that any one can engage in, besides bee-keeping, to make a living for a large family? Is there any work that boys and girls can get to earn anything? When is the best time to come there from this Northern climate? A. EASTMAN.

Union, Ills.

I will answer your questions as best I can. I do not think there is any liver trouble here among the natives, and, in fact, the sickness, as a rule (what there is), we find is among those that come here, as it takes a year to get acclimated. But the little puny sick-spells while you are becoming acclimated are a mere trifle, and some do not have any, and others pay no attention to it.

As to work here, I am not posted, as my whole time is taken up with my bee-business. I have but little time to learn about other lines of work. I can only say that I have not seen anybody hunting work lately, and every one seems busy. I believe our little town now has six new brick buildings going up. Your boys and girls can get to pick cotton from July to December, as farmers usually raise three to four times as much cotton as they can gather. I am at a loss to tell you when is the best time to come, but if I were coming I would start whenever I got ready. It will not make any difference that I know of.

JENNIE ATCHLEY.

Mr. Hasty and the Snake Story.

I see Bro. Hasty has "held me up" on that snake story. Now, Bro. Hasty, we have no time for foolishness, and when I put *anything* in "In Sunny Southland," I mean it for the truth, and nothing but the truth. When I read your kind criticisms in last "Review," I could not help laughing a little. But, to be *sure* I was right this time, I had the surveyor, who was here a few days ago, measure that bee-tree. The cavity where the bees were is about 5x6 inches, and not as large as a 6-inch candy jar. Well, the boys, when interviewed about the snake, said that it was from 7 to 9 feet long, and, worse still, was a "cannibal snake," for it had swallowed another snake over two feet long, and had evidently housed up for the winter to live upon its brother snake. I know this is a big looking snake-story, and it ought to be, as it was a big snake. The shell of the tree was thin.

JENNIE ATCHLEY.

A Large vs. a Small Apiary, and the Kind of Hive.

Query 951.—1. If one man does all the work of an apiary, is he likely to make more by keeping a large number of colonies and performing only the absolutely essential operations, or by keeping a smaller number and making sure that each is in the best condition?

2. What type of hive would you recommend for the former work, to a man who has as yet bought none?

3. What for the latter?—Colo.

1. Yes. 2 and 3. Ten-frame Langstroth.—S. I. FREEBORN.

1. Perhaps a middle ground might be best. 2 and 3. The dovetailed might do.—C. C. MILLER.

1. The small number, and do everything thoroughly. 2 and 3. Plain, movable frame.—B. TAYLOR.

1. I would adopt the latter plan. 2. The 10-frame Langstroth Simplicity suits me.—J. M. HAMBAUGH.

If you keep bees at all, keep them right, keep no more than you can well, and in good order.—E. FRANCE.

1. I think a large number. 2 and 3. In either case the regular Langstroth or the New Heddon.—A. J. COOK.

1. Keep what you can keep well. 2 and 3. The kind of hive spoken of in Query 950, last week.—P. H. ELWOOD.

1. By keeping a large number. 2. A 10-frame Langstroth chaff hive. 3. Perhaps an 8-frame would suit best in this case.—W. G. LARRABEE.

1. My impression is, that a man should only run as many colonies as he can keep in the best condition. I don't

believe a "slipshod" apiary will pay. 2. The regular "Langstroth hive." 3. The same hive; in fact, I think there is no better hive in use, and I am backed up in that opinion by the great majority who use them.—J. E. POND.

1. The smaller number will give the best results, taking a series of years into consideration. 2 and 3. The Gallup or 10-frame Langstroth.—G. M. DOOLITTLE.

1. We prefer keeping more bees and doing only the essential; but there is money in it both ways. 2 and 3. Use a large hive by all means, and in either case.—DADANT & SON.

1. The smaller number, as he will have less outlay. 2. The Langstroth hive, two-story, and run for extracted honey. 3. The Langstroth 8-frame hive.—MRS. L. HARRISON.

1. It never pays to undertake more than one can do well at any thing. 2 and 3. An 8-frame Langstroth hive for any one, and in Colorado they should be chaff hives.—MRS. J. N. HEATER.

1. Large number, but not to overstock his field. But to handle a large number he must be a skillful apiarist, and if skillful he will not neglect even a large number. 2. A standard size.—EUGENE SECOR.

I have neither time nor space to write an article or a book on the best method of bee-keeping. So much depends upon the man, and upon other things, that definite answers cannot be given.—M. MAHIN.

1. It all depends upon the man and his method. 2. The standard Langstroth hive, because you will have no difficulty in getting supplies, and less trouble in disposing of hives in the end. —H. D. CUTTING.

1. He will realize more profit by keeping *no more* colonies than he can properly manage, and his location will justify. 2. A hive of 9 or 10 frames—easy to handle—well arranged for surplus.—J. P. H. BROWN.

1. That depends very much upon the man and the location. 2. I believe generally the man keeping the smaller number on improved methods would be best. 2. One containing not over 1,600 inches, inside measure.—C. H. DIBBERN.

1. That would depend upon the habits and taste of the man. I would say, get between your propositions, and neither neglect nor do too much extra work. 2 and 3. Standard Langstroth, under all conditions.—G. W. DEMAREE.

1. The operator alone can answer this question. Keep only the number you can *well care for*. In other words, you must determine the matter yourself. (Your judgment and common-sense were given for that purpose).—W. M. BARNUM.

1. That depends upon the man, the locality, the kind of hive, and several other considerations. 2. In either case, the hive which can be manipulated to perform all necessary operations with the least amount of labor.—J. A. GREEN.

1. I believe it is like everything else —have no more than you can attend well. 2 and 3. I think the "Improved Langstroth Simplicity" is the best hive for any purpose. It is a good deal as any one is accustomed to a particular hive, I suppose.—JAS. A. STONE.

1. I would keep a smaller number, as two cows half fed do not give as much or as good milk as one well fed. See? 2 and 3. I would use some hive that would take a frame the size of the Langstroth, say 8 or 10 frames; either size is good.—MRS. JENNIE ATCHLEY.

1. The bee-keeper should keep as many colonies as his locality will profitably support. 2. The Nonpareil hive for comb honey is superior to all others, whether few or many are used, as it is suited to any kind of management or season, whether with large or small brood-chambers.—G. L. TINKER.

1. It always pays to do a little well, than to half do a good deal. 2. I do not know that it makes much difference about the hive, if you do not intend to get the most out of your bees. Perhaps they would give you the least trouble if you would put them in a 10-bushel store-box. 3. The one I sell, of course. —EMERSON T. ABBOTT.

1. Making sure that each is in the best condition! You can't do it! Colonies will differ in condition. If you mean the best condition reasonably possible, then that would require but little additional work, and is as essential as anything. Keep the number of colonies that will produce the most surplus from your field, and one man should easily do the work required, and have more than half his time to spare. 2 and 3. The Heddon sectional hive.—R. L. TAYLOR.

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Great Premiums on page 707!

OBSERVATIONS AND EXPERIMENTS.

Toronto Island—Queen-Rearing and Mating—Other Interesting Apiarian Matters.

BY JOHN M'ARTHUR.

(Continued from page 689.)

In 1890, queen-rearing was commenced on the island, and has been carried on in a small way, experimenting and observing closely the effects of in-breeding, also the effects of drones from laying workers, which will be referred to further on. Had I known the labor and expense, and attending to three apiaries besides, single-handed, I would have let the business of queen-rearing drop, except what was wanted in my own yards.

I imported some breeders, and can conscientiously say, that if such be a fair sample of our breeders that thousands are reared from, it will be a *long, long* time before much improvement takes place in our race of bees. I am afraid we are being gulled in this queen-business. No doubt they can be reared in great numbers, but this will cease, because there is a great amount of unnatural or mechanical work about the business. We have only to look at the queens—they are shrivelled, narrow, tapering bits of things. They don't lay worth a rap, and are short-lived. They are not the fine, long, broad, deep-bodied and curved-back queens we find produced under natural conditions—ones that last four or five years. These are the sort that I want to purchase and produce. Like produces like. Fine, large queens will produce fine, large bees and drones, and beauty combined. "A thing of beauty is a joy forever," I think I hear some one say. "Handsome is that handsome does." You can get that, too. Never sacrifice the useful to establish the beautiful.

Enough has been said and done on this line to convince me that our isolation is most complete, and the nearest approach to control the mating of our queens has been reached. Queen-rearing can be conducted with pleasure and profit. There is an assurance or confidence that what is done is right, and no mistakes. Queens cannot be reared on the island so cheaply as on the main land. The loss so far in mating has been heavy, owing, I believe, to so much water being present. Bays cut into the island, with several large lagoons.

MATING OF DRONE AND QUEEN.—A great many experts believe that queen and drone, when coupled, fall to the ground. In fact, there are instances on record of such being the case. In 1882 I saw one drop, but a chicken was smarter than I. I perceived the chicken, and caught both. The queen was dead. There was evidence of mating.

The year following, in the month of September, I found a pair of yellow wasps

coupled. They were on a window-blind. I watched their movements for some time, and thought there might be some light obtained on this subject from them. They took wing and flew away. The male seemed to have the worst of it. He was shrivelled up, and not much of him remained.

Last season I had the pleasure of seeing what I considered was the union of three queens. It certainly was a jollification. The drones assembled, forming one confused and separate body. They could be seen distinctly tearing and striking at one another, often coming to close quarters, several getting hold of one another, and could be seen coming nearly to the ground, breaking their hold and rising again to renew the attack. We have been taught to look upon them as quiet, harmless individuals. They have the faculty of combativeness, and use it with good effect when occasion requires. They fight desperately for a queen. It seems to me the queen is "rounded up" (cow-boy fashion) by the drones and brought to close quarters. When coupled they can be seen bearing themselves away on the wing, the combatants scattering. One of those seen mated dropped in a lagoon in front of the bee-yard. It had shallow water with lots of rushes. I waded in and found her clinging to a rush, apparently suffering pain, as she was rubbing her sides with her two hind legs. You will often see a queen go through the same performance when stung, and also the fourth or fifth day after mating, with this difference—you will often find the bees nibbling at the refuse of the drone's organs, which she is seeking to discharge. This queen was mated, for the evidence was very marked, a portion of the male organ being visible, which she seemed to be anxious to reach with her legs. I gave her ten minutes to straighten up, and locate her hive. She seemed prostrate, and unable to fly. To leave her would be a risk, so I cut the rush and took her to a hive that had lost their queen the day previous. She was accepted without any trouble, and proved a first-class queen.

Whether all drop in mating is a question that needs confirming, which I hope is not the case. Taking my last year's loss into account, it looks as if it might be so.

It is very interesting to watch the queens in their mating excursions, and note the difference in time of mating. Some are mated on their first trip. This class of queens appear not to be the strongest. Some will fly every bright day and escape the drones. When inside pressure is brought to bear upon them, they will after 21 days, if fed heavily so as to excite egg-production, become drone-layers. Others, when long in mating, get balled, sometimes escape and are mated, and in returning get balled again. This is a rare occurrence—very rare indeed—for a colony to reject a newly-mated queen. This is like a wedding in the human family, or the arrival of a first-born—an event of great rejoicing. Joy and gladness seems to be infused into every worker-bee, at the safe arrival of their newly-mated queen. Contrast the difference of a colony whose queen is long in returning. All is tumult and disorder. Let her put in an appearance, or present them with another queen, and the whole colony has the tidings as if by magic. Some are very slow at leaving the hive, cold and indifferent, and remain so for more than 30 days, get mated after that, and do well. This is not in harmony with the theory of some, but it is the case, nevertheless.

Experience leads me to say that the largest queens, and to all appearances the strongest, are as a rule the most difficult to mate. There is no doubt the strongest and fittest drones succeed in copulating, therefore no bad results can arise from in-and-in breeding. It is desirable that in-breeding should be resorted to in order to make the characteristics indelible. Had this not been done in the case of our domestic animals, the effects of a cross on any inferior stock would scarcely be recognizable. I say, then, that in-and-in breeding among our bees is necessary. After all, it is natural selection, and no injury can result from this source.

Another peculiarity was observed in the flight of the drones when circling around the bee-yard—nothing out of the ordinary was observed. On Aug. 20 the atmosphere was a little smoky, the sun shone, and drones flew well. The wind was west, and their movements were to the east. When on long excursions they flew backward with a circular or wabbling motion, with their head to the wind. Being a fine day for observing their movements, I followed their course for half a mile. They could be seen wabbling away over the blue waters of Lake Ontario, probably on a visit to Uncle Sam's domains. As a rule they fly with the wind. This is a fine place to make observations, there being nothing to mar the vision.

Drones from Laying Workers.—I also made some experiments with drones from laying workers, two yellow queens being mated, and as yet I cannot see any difference in the stock produced so far, but we had probably better wait and see how they come out later, as it was the last experiment tried. One was mated Oct. 12, and laid eggs and produced stock about half and half. The drones were black. They were hatched in drone-cells, and were fine, large drones. The other queen laid eggs, but was put into winter quarters before the brood hatched. I put several queens into the cellar that were not fertile, and proposed putting their drones on the island early in spring, and have no doubt they will be able to reproduce those yellow drones, as I found some on the bottom of the hives last winter in the cellar.

Breeding for Color.—Some prominent breeders profess to be able to make steel-gray Carniolans yellow by in-breeding, in four generations. It is an established fact that like produces like, or a similarity. You may as well tell me that you can take the negro and do the same thing—I won't believe you—or the Jew. The Jews in Poland, in Australia, in London, and in New York, are the same. How is this? Because there is no mingling of his organization with that of another. Permanence of race is established, and a thoroughbred. The same I think can be said of the Carniolan race of bees. We admit freaks in nature, of which there are many on record, and many we have seen—such as Albinos. They are to be found in every race; and red has often been produced after 50 years of straight breeding from solid blacks, and black from solid reds. I once saw a light bay colt produced with a black back and sides, the result of the servant throwing his black overcoat over the mother's back at conception, which somewhat frightened her; and a neighbor of mine has in his possession a perfectly white robin which was bred in his garden last season.

Many more could be given which I have seen, but this will suffice. These are incidentals. Climate, food, and habit are the principal causes of variation which we have in any way under our control. We all know that changes produced under those conditions are slow, but accurate. Any who profess to be able to produce those sudden changes of color in any race or class of animated nature by in-breeding must be endowed with supernatural power. We can refer to Jacob of old. Jacob was a scientist of ancient repute, and his theory is practiced by some to-day with success. Having already referred to impressions at the time of conception, it would be needless to say, although its effects are visible among some of our domestics, we have not got it down so fine as to apply it to changing color of queens.

INTRODUCTION OF QUEENS.

BY GEO. W. BRODBECK.

In all likelihood there is nothing connected with the bee-keeping industry that has resulted in so many disappointments to novices in particular, and even those

well versed in apiculture, as the introduction of queens. This is a subject that has been well digested, both theoretically and practically, but, aside from the hatching-brood method, all other methods have at times resulted in failures, and while the one I present may prove likewise, one year's demonstrated entire success tempts me to present it to the readers of the "American Bee Journal."

Self-introducing cages have modified some of the old-time difficulties, but unless one is well versed in the necessary condtions, it also has its drawbacks. The one and the chief cause of failure by the method of caging, is due to the different condition of things existing in the hive from that in the cage. Having occasion to introduce a valuable queen, I gave this subject more than usual consideration, and the thought presented was, why not produce the same condition of things in the hive that existed in the cage? So, suiting action to thought, late in the evening I placed the cage (a self-introducing cage) between two combs, closing the hive-entrance with wire-cloth for two days, and by this method, up to the present, I have as yet to score a single failure.

To the uninitiated I would advise taking the same precautions as one usually does with bees in confinement.

Los Angeles, Calif.

HONEY-RESOURCES OF EAST TENNESSEE.

BY ADRIAN GETAZ.

The first honey, and perhaps the first pollen, are from the different kinds of maples growing along the streams, but seldom in the woods—generally in March, but sometimes earlier. In open winters, the blossoming of the maples may begin in January or February, a little at a time during every warm spell of weather, only to be frozen when the next cold wave arrives. In such cases, the bees can hardly get anything from the blossoms.

After that comes the peach trees, the latter part of March, but, like the maples, liable to open earlier, and only a few blossoms at a time if the weather is warm enough. In fact, there is not more than one year out of six or seven that the peach blossoms, or later the fruit, is not destroyed by the late frosts, at least partially. In April come the apple-tree blossoms. Those being later, they nearly always escape the frosts. These two constitute the bulk of our fruit trees; the other kinds are cultivated only to a small extent. The yield of nectar is probably as good as could be desired, but rains and cold days interfere considerably with the gathering, and if the hives are not well provisioned, feeding is often necessary.

With hardly an interruption, white clover begins; but the yield from it is meagre, owing partly to the poorness of the soil. However, its yield depends chiefly upon the weather. After a good rain it is good for a few days, and then decreases gradually to nothing until the next big shower starts it again. It goes on thus until sometime in July, or even later. But the yield diminishes as the season advances, as the rains can no more keep up with the evaporation from the ground.

A good deal has been written about the relation between the weather and the honey-flow, but nearly all the writers have overlooked the fact that the most essential condition is the presence of a sufficient amount of moisture in the ground. As the earth dries up gradually after the rain, the yield diminishes. The plants with short roots are giving way first, and later the larger ones; trees being the last to suffer, especially if a rainy winter has accumulated enough moisture in the depths of the ground.

During the latter part of May, and in June, we have honey-dew in abundance, or not at all. This in good seasons is the main source of our surplus. The honey

from it is amber, with a slight blackish shade. It has a peculiar, slightly-acid taste, characteristic of the Southern honeys. It is gathered, I think, chiefly from the hickories. Occasionally we have some at other times of the year. Occasionally, also, we have instead of honey-dew, some kind of dark, nauseating "bug-juice." While there is honey-dew, all other sources of nectar are neglected by the bees, except perhaps the sourwood; but the honey-dew has generally disappeared when the sourwoods disappear.

About the middle of May the tulip trees blossom. These are the heaviest yielders of nectar we have. Unfortunately they have been nearly all cut for lumber, and as they do not grow from the stumps, and do not blossom until quite large, we get little from them. In fact, I do not know of more than half a dozen trees within reach of my home apiary. The other apiary is better placed, being only 1½ miles from a tract of wood belonging to the county; the lumber of which has not been cut for several years. There are so few linden trees here that they are entirely out of consideration.

In June, we have the persimmon-trees and the wild grapes, both good yielders, but there is not enough of them to furnish much surplus.

About June 20, the sourwoods begin to blossom, lasting until the middle of July, and sometimes later. This is our surest yield, and also our best, or rather next best, to honey-dew, when there is honey-dew at all. The sourwood honey is perfectly limpid and thick, and unsurpassed in taste, having a delicious aromatic flavor, just strong enough to be good, without any acid or after-taste at all. It is very seldom obtained pure, nearly always mixed with honey-dew or persimmon. As to taste, the persimmon honey is not quite as good, though similar, and is amber instead of white. Sourwood honey never candies—at least it has that reputation.

After that, nothing in dry seasons, which is usually the case; or if it rains enough from minor sources to keep up brood-rearing until the fall flow. But I often have to feed during the latter part of August and the beginning of September.

With the middle of September begins the fall flow, chiefly from golden-rods and asters, and also to some extent from some other plants, all able to withstand considerable drouth. But sometimes it is too dry even for them, or the frosts come too early and cut off the flow. Only once in the last seven or eight years some surplus was obtained from fall blossoms, while feeding for winter has to be done, more or less, at least one year out of two.

The question has been often raised whether the golden-rods yield honey or not. Well, here, bees will work on golden-rod until the asters are open. In fact, bees will work on the blossoms that furnish the most nectar, to the exclusion of all others.

I have frequently to answer inquiries about the resources of East Tennessee in regard to bee-keeping; this is intended as an answer to all. It will apply to all the East Tennessee valley, at least in the main points. I must acknowledge, though, that the neighborhood of Knoxville, is one of the poorest in the valley. Other locations will be found that are better than this, either because the soil is better, or because the valuable kinds of trees have not yet been cut down so close. On the other hand, immense quantities of honey could be obtained in the mountains, where plenty of linden, tulip trees, sourwoods and wild flowers are yet to be found. But one who would go there, must be willing to put up with lack of good society, good means of communication, and other refinements of civilized life.

The most interesting part of the question is, How much do your bees yield? Well, "I don't know." I count an average yield in a good season, one super full (28 sections), or nearly full, and something done in the second super, from the parent colony; and about half that amount from the swarm—second swarms not allowed. If swarming is not restricted, no surplus need be expected. Occasionally

colonies that did not swarm, and did not take the swarming fever, have yielded 3 or 4, or even 5, supers. That is what has so strongly aroused my interest in the non-swarming question. I have not tried producing extracted honey, but it would probably have paid better, only I am something of a hobbyist or crank, and producing comb honey is one of my hobbies.

My next article will be on the management of bees in East Tennessee—or *my* management.

Knoxville, Tenn.

GUM CAMPHOR AND ANTS—A REPORT.

BY W. G. M. SHAFFER.

In a recent number of the "American Bee Journal" the editor asked for new kinks. I do not know whether the one I am going to give is new to all its readers. I have experienced such good results from its use in my apiary the past summer that I feel encouraged by the kind invitation of the editor to give it to the public.

Like many others, I have had considerable trouble with ants in the "Berkeley Queen Apiary," which is located on the south side of the North Mountain. One day, after looking over my honey in the honey-room, and after trying every method I could think of to keep the ants away, it occurred to me, why will not gum camphor do it? It will keep moths out of carpets and out of clothes. I immediately obtained a piece the size of a hulled walnut, and placed it on the crates of honey. In an hour I examined those crates of honey, and to use Dr. Miller's words, "It was all my fancy had painted"—not an ant to be seen.

I hope those who have been troubled in this way will try the above method and report through these columns. If you have an organ, place a piece of gum camphor under it, and the moths will never trouble the felt lining.

Bees in this part of the State have done well. I have one colony of Golden Italians, which has netted me $7.50, after using nearly half of the brood in the spring to rear queens and build up weak colonies. I graded my honey into two grades, and sold it here in my home market for 15 and 12½ cents per pound. I produce comb honey alone, and have an apiary of 18 colonies of bees.

I get the "American Bee Journal" regularly, and enjoy reading it. I formerly took one of the other bee-papers, but I like the "American Bee Journal" so much better that I have never regretted making the change.

Hedgesville, West Va., Oct. 22.

Eight Numbers for 10 Cents.—Yes, we will send the last eight numbers of the "American Bee Journal" for 1894, to any *new* name, for only 10 cents (stamps or silver). Now, here's a good chance to get some of your bee-keeping friends started in taking the "Bee Journal" regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have *three* bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the *last eight numbers of 1894*—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 702 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*

One-Cent Postage Stamps we prefer whenever it is necessary to send stamps for fractions of a dollar. By remembering this, you will greatly oblige us.

Have You Read page 707 yet?

PROCEEDINGS

OF THE

Twenty-Fifth Annual Meeting

OF THE

NORTH AMERICAN BEE-KEEPERS' ASSOCIATION.

BY FRANK BENTON, SEC.

(Continued from page 697.)

Apiculture in Germany.

Frank Benton—There is just one little point in Mr. Gravenhorst's essay that I would not like to have pass unnoticed. It has appeared from time to time in the German newspapers, and now and then in those printed in English. I refer to the statement that Dzierzon invented the movable-comb hive. It is nearly always put, as Mr. Gravenhorst has it, absolutely, as though Dzierzon were the *original* inventor of the first movable-comb hive, and it has been repeated so many times that every German bee-keeper seems to believe it—even many Americans credit it. Yet any one who takes the trouble to hunt up the records will find out that Dzierzon did not invent the first movable-comb hive, if, indeed, his boxes, with bars only, could be called movable-comb hives. The fact is, that movable-comb hives similar in principle were used in other parts of Europe long before Dzierzon was born, and we have authentic records, with illustrations of these hives, which were published in Paris more than 150 years ago. Among others who have left records of these hives, it is sufficient to mention Contardi, in 1768, and Abbe della Rocca in 1790. The latter had kept bees on the Greek island Syra, and both of these authors describe the wicker-work basket-hives "used by the ancient Greeks," and according to della Rocca, still in use in 1790 in Candia. Traveling in Greece, in 1883, I saw just such hives in use among the peasants living away back in the mountain regions—in fact, on Mt. Hymettus I purchased and manipulated some of these hives stocked with the native Greek bees. The same system has been followed there for many centuries. The peasants from whom I obtained these hives knew nothing of the bee-keeping of other countries, nor for that matter much of anything about the outside world. Many of them could neither read nor write. Their hives were supplied with bars across the top, a comb being attached to each bar. Some of these bee-keepers knew how to make artificial swarms by removing part of the combs and bees to a new hive, cutting the side-attachments loose just as Dzierzon does with his hive to this day. Huber's leaf hive—essentially a movable-comb hive—appeared a half century before Dzierzon's hive. And in Russia, Propokovitsch, early in this century, invented and used a hive with frames in three stories, which was described and illustrated in Paris in 1841, thus seven years before the year assigned by Gravenhorst to Dzierzon's invention. Whether the latter knew of these inventions or not, I cannot say, but being a priest he knows Latin, of course, and might easily have gotten hold of these works in the French language, and acquainted himself with their contents. Dzierzon surely would not venture to claim the invention of frame hives, although others have done this for him. Nor do I know that he claims to have invented movable-combs. But others repeat the claim, and he says nothing regarding it, so that at last almost every bee-keeper in Germany, and even some over here, believe that such things did not exist until he invented them, much less that they were known centuries before he was born. He deserves a great deal of credit for making movable-comb hives more popular, and introducing more rational methods of keeping bees in Germany; and in referring to this matter let us have the thing correct, and give credit to whom credit is due.

Dr. Miller—The Germans swear by Dzierzon. They believe in that, and, as a matter of courtesy to them, and in the same spirit as we have acted toward them so far, I do not think it is our part to sit as censors on their views. They want to believe in Dzierzon, and it does not matter. It is none of our family quarrel at all; but as they want to believe in that thing, we ought to be courteous to them and let them live in happiness.

Mr. Benton—I do not agree with Dr. Miller at all. History is history, and when we quote it the truth must be told, no matter who is cut by it. I only offer this statement as a matter of fact. It is a record that cannot be disputed, and I stated it as a fact which I know, but without asking the Association to subscribe to it.

Dr. Miller—I don't see what the discussion of this essay will bring about. I want to know how to make enough

money to subscribe to the bee-papers published to-day.

F. H. Richardson—Mr. President, I think this essay that Mr. Benton has read, is a very good question for discussion.

Mr. Holtermann—We are not paying enough attention to the practical matters, I think; and by answering the questions, I think we will get more benefit.

Pres. Abbott—Gentlemen and ladies, I have here a letter from Mr. Doolittle, in which he asks a question. What is your pleasure regarding it?

Mr. Benton—I would suggest that Mr. Doolittle's question should go into the question-box.

The Kind of Bees.

John Schumacher—Mr. Doolittle asks if a colony in good condition would not do more work. I do not think that a good colony of bees in a poor season, or a poor colony of bees, one that is weak, will store much honey in a good season. That is a sure thing. A poor colony of bees will not store any honey, no matter what the season is, and no matter what kind of bees we have.

Dr. Miller—I do not say that a 5-banded, or a 3-banded, or a 43-banded bee might not be a better bee. A bee because it has more color may be better or it may be worse. Some may be the very best, or some may be the poorest, but I do not think we are likely to have better bees.

Mr. Benton—When this matter of the yellow bees came up, there was a point that I thought I would bring out, but a favorable opportunity to do so did not occur. I have seen yellow bees and yellow bees. I have seen some yellow bees from Cyprus that were great honey-gatherers. They have given us a record that no other bees have equalled. Of the yellow bees in this country I have seen some that I believed contained Cyprian blood, but those that contained Cyprian blood were energetic and excellent honey gatherers. I think there ought to be a distinction between those that are yellow sports and those which have been produced by crossing with Cyprians. Sports *may* be somewhat degenerated. I am not sure they are. I have not tried them sufficiently. I can state that the Cyprians are excellent honey-gatherers, and, properly handled, they can be manipulated as easily and rapidly as any 3-banded Italians.

Dr. Miller—I think a mistake has been made. We have gotten from Italy a race of bees, and we have found they are valuable. I will illustrate that and try to get at it in another direction. Here is a breed of cattle, renowned for their milk. They have certain marks, and this marking of the breed is, well, say it is the whole of the head white. That is the mark of the pure breed. I take the notion that the cattle give more and better milk because they have the white head. I have a cow that has a white head and a white neck, and I think that a cow that is white all over would give a great deal more milk, and of better quality because she is white all over. I fool myself. When I vary from that mark of the pure breed I make a mistake, and when I vary from the 3-banded and take a 2-banded or a 5-banded, and I am going away from that breed, I fool myself. This 3-band business is simply a mark of a valuable race of bees. There may have been 2-banded bees, but so long as we know the 3-banded bees are good, that is the kind of bees we should have.

Adjourned until 7:30 p.m.

First Day—evening session.

The Association met, pursuant to adjournment, at 7:30 p.m.

Pres. Abbott introduced Mayor Shepard, who, as chief executive of the city, extended in a brief and well-worded speech a cordial welcome to the Association, and an earnest wish that its work might prosper. This was responded to by Mr. George W. York in behalf of the United States, and Mr. R. F. Holtermann in behalf of Canada. Miss J. Graves and Mr. Hardman then favored the convention with some excellent vocal and instrumenal music, after which the President introduced Mr. J. R. Rippey, Secretary of the Missouri State Board of Agriculture, whose remarks were followed by a vote of thanks to him for the part he has taken in securing a place for apiculture on the programmes of the farmers' institutes which are being held in the State.

A violin solo, by Prof. N. Bornholdt, followed, and was enthusiastically received, whereupon Pres. Abbott introduced Mr. T. B. Terry, of Ohio. This gentleman, after alluding to the nature of the institute work being done in Missouri, spoke in substance as follows:

Value of Clover-Growing.

I will give you a little bit of experience on one line, and that is the line which I am called on to speak about a great deal in this State, and that is in the direction of clover-growing, the amount of fer-

tility we can get in our land from clover growing systematically. There is not enough attention paid to the systematic rotation of growing crops, and so we are trying to urge this rotation of crop-growing so as to bring in this clover crop once in three or five years. We want to bring that in, in order that we may bring in the crop that brings in money, so that the land will grow more bushels to the acre, and grow it cheaper. Now, if I was talking to an audience of

Vice-President L. D. Stilson.

farmers, I would tell that we can grow more tons of hay where it is grown in rotation, and it is a fact. We can grow about ⅓ more hay in rotation, and it is worth more. Do you not think that any man who is told these things, and can see them for himself, would not go into the systematic growing of clover?

An important point in this connection is, where does the clover get this excess of fertility? From the air and from the subsoil. It gets the nitrogen from the air, and the farmers by following the systematic rotation of growing clover can get from the air all the nitrogen they need for practical purposes as long as time lasts. It is only within a short time that we have been able to prove this. The clever gets the nitrogen from the air, and minerals from the subsoil. It has been proved by science that the clover can get the minerals from the soil below, and store it in the soil above. That is why we call it a renovating crop. We are trying to urge the farmers to grow clover and not timothy. It will yield about ⅓ more of a crop than timothy, and is worth about ⅓ more.

I want to give you a little experience right on this line to illustrate this point—not to brag about what I have done, but to show you what I have been preaching can be carried out in practice. Right by the side of one of our best fields is a piece of land belonging to a neighbor. Originally it belonged to our farm. It was cleared at the same time, and all belonged to one man. The character of the soil is identical—the same in both fields. My neighbor has been farming on this land for 25 years, but somewhat differently from what we have on ours. The rotation practiced is the same in both cases, with the single exception that for the past quarter of a century my neighbor has grown timothy in place of clover, while we have grown clover. Timothy feeds on the soil, and is not what might be called a renovating crop. Every ounce taken out makes the soil so much poorer, while clover makes it richer. I said that our rotations were the same—ours, clover, potatoes and wheat, while his was timothy, potatoes and wheat. We have been growing this for a good many years. This year both of us put wheat in the fields. Last season we both had potatoes. The year before that we had clover on our field while our neighbor had timothy. The neighbor had timothy with a little clover scattered through it. This was in 1892. We cut the first crop of hay, and we certainly had as many pounds as our neighbor. The second crop of clover grown that season we allowed to go back to the land. It was broken down on the surface to lie there and shade the ground and furnish a honey crop. Our neighbor had no second crop to amount to anything. Timothy does not give a second crop. We had no manure or fertilizer, only the clover roots and tops, and that cost us nothing. We had as much hay as our neighbor. Our neighbor put on a heavy coat of manure.

There was a little rivalry between us, and when I got home in the spring and saw the amount of manure he had put on, my heart sunk away down. He never had beaten us in 25 years, and I did not want him to. We both put in potatoes, beginning to plant the same day by mutual consent, and they were both put in by machinery. There was no difference in it at all except in the fertilization of the land. When it came digging

time in the fall of 1893, we had 167 bushels to the acre. You will remember that it was a very dry year, and we did not have a large crop at all. Our neighbor had 100 bushels to the acre on the average. We sold our crop for 75 cents per bushel and our neighbor did the same. There was a difference of $50.00 to the acre in favor of the clover-fed land. We dug our potatoes at the same time and prepared our land. We put in our wheat, and my neighbor threshed first and he had 42 bushels to the acre. That was a big yield. I never had had over 40 bushels to the acre, and I thought that he had beat me. However, when we came to thresh, I gave my neighbor the job of measuring the grain so that he might know just what I had, and when the separator ran to 42 bushels to the acre it did not stop, but ran right along and kept on until it got to 50 bushels to the acre, and it was wheat that weighed 65½ pounds to the bushel. I was pleased, not only because I had a good crop, but because I had proved that my way was right. I had worked hard on that land, harder than I otherwise would.

We went on a farm 25 years ago that was so run down by poor cropping—by careless cropping, I mean, that it would not go in the best years perhaps over 8 bushels of wheat to the acre. It has paid for itself, and has been brought up from 8 to 48 bushels to the acre. We have one field that will not produce as much as that, but the yield there was 45 bushels to the acre, so that forms an average of 47¾. I am not the only man that believes in this, but there are thousands who are doing it, and there ought to be many and many thousands more who should do it, and that is the reason why I am willing to leave my home, and be uncomfortable oftentimes, in order that I may impress this fact on my brother farmers throughout the land.

T. B. TERRY.

A recitation and a song by Dr. Miller closed the evening session of the first day.

(To be continued.)

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

Cancers—or Supposed Ones.

The very name brings terror to many hearts! But let your minds find relief in the fact that not one in fifty of the so-called cancers are anything of the kind. There is a class of persons, abundant on earth, whose's seeming great joy is to inspire fear and distress in the hearts of the uninformed. Such persons are ever ready to pronounce a swelling or a sore, or even certain debilities cancers, on their sheerest guessing. Especially are swellings of the breasts, whether painful or not, at once feared as being cancers, when, in point of fact, they are nothing of the sort; but in the fear that they may be, resort is had to all sorts of treatments—liniments, plasters, poultices, besides big doses of all the patent nostrums that can be heard of—the very worst thing one can possibly do—measures most likely to develop a cancerous tendency, if possible.

"Well, then, what *shall* I do?" asks an excitable little woman. *Let the swelling alone!* Nine chances in ten it will entirely disappear if you simply wear your clothing so that the swollen place will not be rubbed and chafed by it. And don't stuff a lot of cotton or other material to enhance the form; it keeps the parts unnaturally warm, and so irritates.

Corsets are very frequently the cause of swellings of the breasts. The stiff upper edge of them often accidentally punch into the breast, and so bruise the inside flesh as to produce painful swelling, usually in the form of a somewhat hard knot. Well, you just let it alone—don't rub it or squeeze it, or poultice it. A piece of oiled-silk over the spot is all you need, and that should not be necessary, if your dress don't rub against it. Keep a cool head on your shoulders, and stop thinking and talking about it, and the probability is that the swelling will be all gone almost before you know it.

Grandma Jones was so certain she smelled smoke, that she got up, lighted a candle, and began to investigate. She accidentally ignited some rubbish in the cellar, which quickly blazed up, and—sure enough! the house burned down! If you feel you want some one to decide what the matter really is, go see your doctor—and if he laughs at your unnecessary fears, don't get vexed at him, and think he's a "heartless thing." But instead, take courage and dismiss the subject from your mind.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Dr. Miller's Case of "Gastralgia."

MR. EDITOR:—I am a little afraid of Dr. Miller, and so I send this to you. After reading what W. F. Haines has to say on page 647, I would suggest that perhaps Dr. Miller's cistern may have a case of "Gastralgia," and "got it bad." Perhaps he had better quarantine it, to be safe. He can, if he likes, follow the treatment laid down by Mr. Haines, which is very effective. But I believe if he will submerge the lime in "aqua pure" when he has it in the cistern, that it will germinate gas enough to kill all the 'crobes on his whole 35 acres. But perhaps to make certain sure, he had better give it a new location.

I hope you see the point, Mr. Editor, and I think *he* will, for I see his "picter" in "Bees and Honey," and think he knows a good thing when he sees it.

It is now 5:30 a.m., and I must hustle and get to husking corn. NEDDY.

Deer Park, Ill.

Short Honey Crop.

I have 7 colonies. The honey crop in our locality was short, owing to the continued drouth, white clover being about the only dependence for the bees. They have stored no surplus, but have about 20 pounds of honey per colony for winter. C. H. STORM.

Reynoldsville, Ill., Nov. 24.

Printer's View of the "Bee Journal."

By stepping far enough away to get a sort of "bird's-eye view" of the whole "American Bee Journal," the "Contributions" department appears as bread and potatoes, and the other smaller departments as spiced foods. Originally these departments were comprised in that of "Contributions," but, by going through the editorial extractor, which has a briskly moving reel, the departments result, enabling the reader to more easily secure the part he desires.

Thus some read the "Editorial" first, some "Sunny Southland," and others the "Letter Box"—pie and cake first, and substantials last, and *vice versa*—a good deal according to their "bringing up"—but the one as essential as the other to complete a hearty intellectual meal. Time was when it was relishable all jumbled together, so to speak, because they were very glad to get it in any shape or style, just as our oldest relatives remember before desserts were invented, and the food placed in a single dish on the center of a wide board, and tallow candles were a luxury. But in the passing age, what the consumer takes must contain spice and electricity to be appreciated.

Now, if there were only "Contributions" it would be far better the old way; but, with the numerous accompanying departments, it would puzzle the casual observer to distinguish the principal or original; and it also restores to the main department its relatively prominent and broader aspect. Thus I look upon the recent change in the "make-up" of the "Contribution" department as a systematic, consistent, and demanded departure, and as an altogether "nice" perception of the printer's art, and a grand improvement of the "Old Reliable." C. W. DAYTON.

Downey, Calif.

An Experience With Bees.

On May 30, 1893, I received a colony of Italian bees from South Carolina that I had purchased of an Ohio dealer. They were five days en route, and arrived with empty combs. Poplar was just coming in bloom. In a short time their hive was full of brood and honey, and 17 pounds of honey was stored in the sections. I bought a queen of a Texas breeder, and divided the bees, and in a couple of weeks the old colony sent out a swarm. As the severe drouth which now set in cut short the honey crop, I had the three colonies to feed for winter.

My neighbor had 7 colonies of black bees, and my Italians began robbing a very weak colony of his, which wound up with a general pillage of nearly all his hives. To save his bees, I moved mine two miles into the country, where they behaved all right until March, 1894, when they began robbing a neighbor's bees, who notified me of the case,

Very Short Honey Crop.

The honey crop has been almost an entire failure here this season. My crop was 100 pounds of clover honey from 3 colonies.

I can't see how I could get along without the "American Bee Journal."

GEO. H. CURL.

Jameson, Mo., Nov. 17.

Sample Copies of the "American Bee Journal" will be mailed free to all who ask for them. The next three or four months will be just the time for getting new subscribers, and if any of our friends can use sample copies among their bee-keeping neighbors, in order to get them as new subscribers, we will be glad to mail the samples, if the names and addresses are sent to us. Better educated bee-keepers will mean better things for all.

Two Bound Volumes of the "American Bee Journal" for 1891 we have for sale, by express, for $2.00, or by mail for $2.30. They are bound in good board covers with leather backs, gilt-lettered. The first one who sends the price, will have the books.

Have You Read the wonderful Premium offers on page 707?

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & Co., 128 Franklin St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMONS-MASON COM. CO., 423 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Oolo.

ONTARIO, CANADA.—The annual meeting of the Ontario Bee-Keepers' Association will be held at Stratford, Jan. 22, 23 and 24, 1895. All bee-keepers are cordially invited to attend. W. COUSE, Sec.
Streetsville, Ont.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

ILLINOIS.—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend. B. KENNEDY, Sec.
New Milford, Ill.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

MICHIGAN.—The Michigan State Bee-Keepers' Association will hold its annual meeting Wednesday and Thursday, Jan. 2 and 3, 1895, in the city of Detroit. at the Perkins Hotel, cor. of Cass and Grand River Avenues. Rates, $1.25 and $1.50 per day. The former rate if two occupy one room. This will be at a time when railroad rates will probably be one-half fare. W. Z. HUTCHINSON, Sec.
Flint, Mich.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1⅓ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.
Indianapolis, Ind.

IOWA.—The Eastern Iowa Bee-Keepers' Association will hold their annual meeting at Anamosa, in the court room, on Dec. 26 and 27. There will be reduced rates on all railroads at this time. This will give all a good chance to attend the bee-meeting, and an opportunity to look through the State prison, which is located at Anamosa. Let all the bee-keepers within reach take advantage of this grand opportunity. Come with the intention of having a grand, good time. Let each bring with them some fixture or fixtures that he or she thinks of value in the apiary, and some important question for discussion.
Welton, Iowa. FRANK COVERDALE, Sec

Honey & Beeswax Market Quotations

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 6@7c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27@28c.
R. A. B & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are not quite as salable; and 2-pound sections are little called for. We quote as follows: 1-pound fancy clover, 13@14c.; 2-pound, 12½@13c.; 1-pound white, 12@12½c.; 2-pound, 12c.; 1-pound fair, 10@11c.; 2-pound, 10@11c.; 1-pound buckwheat, 10@11c.; 2-pound, 9@10c. Extracted, clover and basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 50@60c. per gallon. Beeswax, scarce and in good demand at 29@30c. C. I. & B.

CINCINNATI, O., Nov. 19.—Demand is good for choice white comb honey at 14@16c. Extracted is in fair demand at 4@7c., with a fair supply.

Beeswax is in good demand at 22@27c. for good to choice yellow. Supply scant.
C. F. M. & S.

KANSAS CITY, MO., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. Co.

CHICAGO. ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat. 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6½c.; buckwheat, 5½@6c. Beeswax, 27@29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO. N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

KANSAS CITY, MO., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark. 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Nov. 24.—The receipts of comb honey have been very large and exceed those of former years by far. The demand has not been very active of late and there are no signs of improvement. The supply is accumulating and the prices show a downward tendency. We quote: Fancy white, 1-lbs., 13@14c.; fair white, 11@12c.; buckwheat, 10c. Two-pound sections are in very light demand and sell at from 1@2c. a pound less. The market on extracted is quiet, with plenty of supply of all kinds. We quote: White clover and basswood, 6c.; Southern, 50@55c. per gal. Beeswax is firm and in good demand at 30@31c. H. B. & S.

CHICAGO. ILL., Nov. 27.—Up to the present the sales on honey have met with our expectations. We have received considerably more honey than we figured on handling, owing to the short crop report, and we think the early shippers reaped the benefit. However, we are now getting the average price, viz.: Fancy, 15c.; white, No. 1, 14@13c. Extracted, 6@7c. Beeswax, 28@29c. J. A. L.

Profitable Bee-Keeping, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, possibly each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

RUDY'S PILE SUPPOSITORY

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Pease mention the Bee Journal. Nov15

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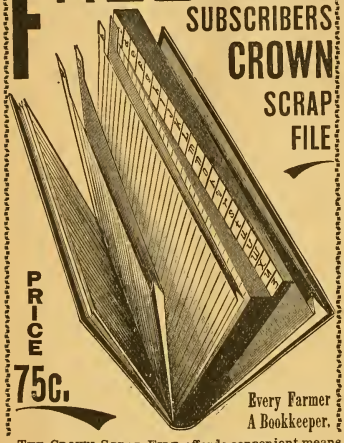

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It is a neatly bound book, 8x3½ inches, indexed and made of the best grade of linen paper and bound in flexible cloth. Each double page represents an indexed filing pocket, the lower end of which is provided with an inch fold permitting two inches of expansion when the pocket is open to receive and contain clippings and scraps of information. These pockets will hold one thousand inches of single column newspaper clippings. The index letters on the pockets serve also to index the ruled sides thereof adapted to receive ten thousand written words. A large pocket is attached to one lid of the cover to receive miscellaneous items until time permits to classify and drop them into the proper indexed pockets. The file sells separate, Leather, 75 cents. Cloth, 50 cents.

Clubbing and Premium Offers.

☞ Mailed on receipt of price, or clubbed with the Bee Journal for one year, both together, as follows: Leather bound Scrap File and the Bee Journal for $1.60; Cloth bound File and the Bee Journal for $1.40. Or, we will give Leather File as a Premium for sending 3 new subscribers to the Bee Journal for a year, and the Cloth File for 2 new subscribers. All new subscribers sent on this offer will receive a free copy of "Bees and Honey."

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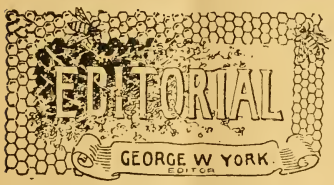
VOL. XXXIV. CHICAGO, ILL., DEC. 13, 1894. NO. 24.



Prof. A. J. Cook, we understand, will represent the California State University at Farmers' Institutes in Southern California during the coming season. That should mean that bee-culture will be properly presented in that region. Prof. Cook knows how to make the subject interesting, and no doubt the industry will be greatly helped there.

Mr. G. K. Hubbard, of Indiana, whose wife has been an invalid for several years, writes that she is better now. We are glad to learn this, and trust she may fully recover. They are in Riverside, Calif., and Mr. H. says that he is "picking up an apiary with more earnestness than ever, having bought 31 colonies, with more in view."

Friends.—"If a man has a thousand friends he has not one too many."—Review.

This also is true: If a publisher of a bee-paper has 10,000 friends, or subscribers, he has not one too many. There is no limit to the number of friends every man or woman would like to count as their own. The "Good Book" says that he that would have friends must make himself friendly. Pretty good recipe for friend-making.

Thomas G. Newman and Wife leave Chicago this week for a trip to the East, visiting relatives and old-time friends. They expect to return about Jan. 1. We trust they may have a pleasant time and safe journey. Mr. Newman certainly needs the rest and recreation afforded by such a trip, after having put in some months of hard work in several of the life insurance and fraternal orders to which he belongs. And the change will do Mrs. Newman much good, as her health is not the ruggedest.

Dr. C. C. Miller expects to be at the meeting of the Northern Illinois Bee-Keepers' Association at Rockford, Dec. 18 and 19, in the court house.

Belated Convention Report.—As we expected, some of our subscribers are becoming justly dissatisfied with the snail-rate at which we have been compelled to publish the report of the proceedings of the St. Joseph convention, held Oct. 10, 11 and 12. Here is a fair sample of what is in the minds of some of our readers, which we received Dec. 4:

EDITOR YORK:—What is the matter with that report of the St. Joseph convention? Here it is Dec. 3, and the convention that commenced in October hasn't got through its first day. At that rate, when will we get the last of it? Those who were there perhaps do not care, but most of us were absent, and depend upon the reports that have always come so promptly heretofore. Of course we do not want to blame you if you are not to blame, but we would like to know, you know. If you are getting so old that you cannot move around so lively as you used to, just say so and we will make allowance. If that shorthanded reporter has been on a spree and lost his notes, say so. But really, we cannot see why there should be such slow work when the reporter

can get his matter to you from any part of the States in so short a time. *What is the trouble, anyhow?* SUBSCRIBER.

As we have several times stated in these columns, *we* have been ready all the time to crowd through the report of the North American, but it seems that Secretary Benton had taken it upon himself to hold back the report as long as possible. We wrote him twice, and telegraphed once, to hurry up the report, but receiving no reply at all from him, giving a reason for the delay, we concluded that there was no good reason for it.

A goodly part of the report was in Secretary Benton's hands, from the stenographer, Mr. Lighton, on *Oct. 25*, and the *balance* of it reached Mr. Benton, at Washington, *Nov. 7*. From this it will be seen that there has been ample time to have had the report nearly completed in the Bee Journal by this time, whereas *less than half* of the proceedings are now published!

Had the convention voted to use Mr. Hutchinson's report, instead of the Lighton-Benton report, as we hoped they would be wise enough to do, the needless delay would not have occurred—and yet it is not the fault of the stenographer, Mr. Lighton.

We employed Mr. Hutchinson to take the report of the proceedings for the American Bee Journal, and offered to *give* the association the use of our report for the usual pamphlet. Since the convention we have paid Mr. Hutchinson for a report that we supposed we would not need, as, according to the vote of the convention, we were to publish the Lighton-Benton report in the Bee Journal.

We were quite satisfied not to use Mr. Hutchinson's report, when it was so voted, presuming, of course, that we would have no difficulty in getting the other report as fast as needed. The consequence is, that through the delay it is now quite possible that no pamphlet report at all will be published.

We might say that although we have a goodly slice of the report in this issue, at this time (Dec. 6) it is every bit we have in the office, and the trouble is, we don't know whether we will get any more of the report in time for next week's number. It is this *uncertainty* that is so aggravating—especially as there is no necessity for it.

LATER.—We have received *some* more "copy" on the report, but we should have had it *all* in our hands *long ago*, so we could have published it as fast as we desired right after the meeting.

Overeating seems to have been the cause of Editor Ernest Root's recent illness. So he says in last Gleanings. His "appetite," whetted up to a "keen edge," and then treated to some "big dinners, made mischief" with his internal anatomy. He hopes it will "be a warning to others." But most people nowadays are not troubled with "big dinners"—if they only succeed in getting a fair, square meal they are happy. This writer never overeats—not because he never has a chance, but because he believes in the truth of the saying that "enough is as good as a feast." So when he has eaten "enough"—well, he stops right there. This plan is commended to Editor Root.

Accident and Death.—Mrs. Atchley has sent us the following sad news, dated Dec. 4:

BRO. YORK:—I am informed that Louis V. Esneault, proprietor of the Donaldsonville, La., Bee-Keepers' Supply Factory, has lost his right arm and left leg by a circular saw. This was a *very* sad misfortune for our young brother.

Also, the infant son of P. F. Gassaway, of Floyd, Tex., died a few days ago. Mr. G. was an old neighbor of mine, a subscriber of the American Bee Journal, and a large bee-keeper. Yours truly,

MRS. JENNIE ATCHLEY.

☞ **See A B C** offer on page 739.

☞ "I would not do without the American Bee Journal. I can say it is the 'light of the way' through bee-keeping."—B. P. Shirk, of California, Nov. 28, 1894.

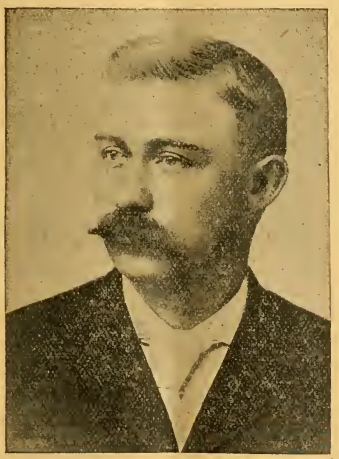
The A. I. Root Company we announced on page 678, and promised an explanation of the change soon. In Gleanings for Dec. 1 we find the following by A. I. Root himself, telling the "why" and the "wherefore:"

THE A. I. ROOT COMPANY.

The friends will notice by our price-list and stationery that the above title to our business takes the place of simply "A. I. Root." Perhaps I may say that no new method of management will be introduced,

and no new members are to have anything to do with the business. It will be conducted as it has been heretofore, by A. I. Root and his family, including the son-in-law, Mr. J. T. Calvert, who has been for many years business manager. A. I. Root, besides being president, will, for the present, be by far the largest stockholder; Ernest R. Root, vice-president; J. T. Calvert, secretary and treasurer.

The principal reason for making this change is, that the business may go right on uninterruptedly in case of death or accident to the founder, A. I. Root. We as a



J. T. Calvert, Treas. N.A. B.-K. A.

family do not desire the intervention of law or lawyers to settle up our business in case of death to one or more of us.

We should think that the editorial representative of such a big company, would from now on want to return to the editorial "we," in Gleanings, instead of using the "perpendicular" pronoun "I."

Some people "don't know" one good reason for using the editorial "we." We are not surprised at that. There are a whole lot of things that some very "knowing" folks "don't know." So there's no need of feeling badly over not knowing just "one good reason" for some things. Besides, there are some matters that are *not worth* knowing about. May be "we" is one of them.

Some editors *may* use "we" because they are "we(e)"—*little*—editors. Yet there may be nothing very "small" about them.

How to Make Honey-Candy.—Mr. W. S. Pierson, of Eureka, Mich., asks for a recipe for making honey-candy. Here is one used by Thos. Dobson, of Nebraska:

Take one cupful of honey and the same of best white sugar; mix together and boil in a new tin, which has been well greased with fresh butter. If the candy is to be white, pull it while warm. When cool enough cut into small pieces and wrap in buttered paper, as exposure to the air makes it soft.

A High Compliment is the following, for which we "make our best bow:"

The American Bee Journal is excellent. I get little time to read even bee-papers, but I must read the American Bee Journal. I congratulate you on getting up such a good paper. It improves rapidly.

A. J. Cook.

Claremont, Calif., Nov. 19, 1894.

Editor Quigley, of the Progressive Bee-Keeper, calls upon the six other editors who were present at the St. Joseph convention, to "decide" whether or not he looks like an excitable, drinking man. It seems a Texas correspondent of the Progressive intimated that Bro. Q. was about that sort of a critter. No, if this writer may judge from his appearance and conduct at St. Joseph, Editor Quigley is a model young man in every respect—one who is not easily excited, and who would not be guilty of indulging in intoxicants at all. We *hope* he has too much horse-sense to do the latter shameful trick.

Mr. Chas. Dadant has a well-deserved, enviable reputation as a bee-keeper, on both sides of the Atlantic. In a "Chat on European Matters" in Gleanings for Dec. 1, Mr. Charles Norman, in speaking of French bee papers and books, says this:

Among the books are translations of Mr. Cowan's "Guide," and Mr. Dadant's "Revised Langstroth." Mr. Charles Dadant is a contributor to the *Revue*, and his articles are well written—indeed, the emanations of a mind which combines fine judgment with great experience. He is held in high esteem by the editor of the *Revue*, as well as the other contributors. When mentioning his name they do not spare words like "master," "celebrated," and the like, and

they are quite proud of Mr. Dadant being their fellow-Frenchman. In fact, in bee-matters, he is, to all appearance, *the* authority with them. The French, like any people, may have their faults, but they are far from participating in that hypercritical vein which characterizes some other nations; and whenever one of them has worked himself up to celebrity, they acknowledge it without jealousy, and treat him with that respect which is due him.

Good for the French bee-folks! We of America may well strive to imitate their unselfishness in giving "honor to whom honor is due." Down with all jealousies, and up with "due honors!" 'Tis never too late to learn—even good manners, and to do right.

A B C of Bee-Culture—just see the magnificent offers on page 739. Every one of our subscribers can now have a copy of that splendid book.

Short Call at Dr. Miller's.—On our way to Rockford, Ill., on Dec. 1, we stopped off a few hours—from 1 to 6 p.m.—at Marengo, to see Dr. Miller and family. All were well, and apparently as happy as usual. We had a most enjoyable visit—'twas "short but sweet."

A profusion of beautiful plants and flowers filled the large south bay window in the sitting-room of Dr. Miller's house—we presume to serve as a reminder of the "flowers that bloom in the spring"—next spring, we hope, and for the bees that then will be ready for another year's work.

We forgot to learn whether the Doctor had disposed of his 1894 crop of honey (20 pounds!), but presume he had, as he said he had his winter's coal in, and we don't see how he could buy so much coal unless he had sold all his honey!

Both Miss Wilson and Dr. Miller agreed that the percolator feeder, as described on page 437, is the greatest thing in bee-keeping for many a year. They had fed 1,500 pounds of sugar for winter stores with such ease this fall that it was almost a pleasure instead of a wearisome task. Mrs. Miller thought so too, as there was so much less "daubing around" the house than when syrup had to be made for feeding. Mrs. Miller is nice, sensible housekeeper, you see, and doesn't like "stuck up things"—whether they be kitchen things or "human things!"

In Bro. Ernest Root's account of his recent bicycle trip he gave what he considered a "good one" on Dr. Miller, in Gleanings for Nov. 1. Here it is:

I must not forget to give a "good one" on Dr. Miller. When I reached Marengo I was a little turned around, and had to inquire the way to the Doctor's. Approaching a small boy I said, "Can you direct me to the home of Dr. C. C. Miller?" "Oh! yes, sir," he replied. "You go down this road, pass over two hills, and then you'll come to a great big overgrown hedge-fence and a whole lot of weeds and things. This is the place. The house is back from the road, and the yard is all full of stuff. You can't miss it."

In the next number of Gleanings Dr. Miller had this "straw" in reply to Editor Root's "good one:"

"Weeds and things" is my "best bolt," Ernest. I lose less money on them than on any other crop I can put in, aside from their use to "mark the locality."

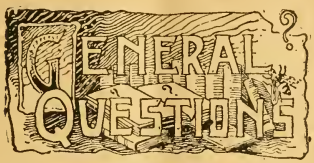
Then Bro. Root lengthened out the "straw" with this explanation:

Your yard was no worse in point of weeds than the yards of most bee-keepers I have visited. The fact is, many of them furnish either pollen or a little honey. Sweet clover grows rank and thick about most bee-keepers' homes. But, say, the way that small boy "marked your locality" was a joke to good to keep.

Well, we didn't see any weeds at all, but weeds or no weeds, we would like to warn Bro. Root, and also the "small boy" mentioned, that it wouldn't be good for their general health to let Miss Wilson get hold of them! The idea of slandering (?) Dr. Miller's home in that way! and reflecting upon his way of caring for his surroundings! Miss Wilson intimated that she "had a bone to pick with Ernest" over the matter, and we think she meant it, too. We admire her pluck—and if she should "pluck" or "pick" a few of "Ernest's" bones—well, he'd be more of a boneless Root than a Rootless bone, that's sure!

But we wouldn't have any one think from the foregoing, that Miss Wilson is anything but the pleasantest and "properest" of young ladies—it was simply a case of "righteous indignation"—that's all.

Two Bound Volumes of the American Bee Journal for 1891 we have for sale, by express, for $2.00, or by mail for $2.30. They are bound in good board covers with leather backs, gilt-lettered. The first one who sends the price, will have the books.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Fixing the Bees in the Cellar.

I put my bees into the cellar Nov. 9, taking the bottom-board off and putting a super under each hive, with a cloth spread over the frames. Now is that the way, or will I have hives and no bees in the spring? B.

Hammond, Wis.

ANSWER.—I believe it's a good plan to put a super under the hive. There is an advantage in that there is no danger of the entrance being clogged with dead bees. If I understand you correctly, there is no covering over the hive except the cloth. That may or may not be best. Something depends on the cellar. With abundance of ventilation below, there ought to be no need of ventilation above. If, however, the cellar is warm enough, there may be no harm and possibly some good in having the ventilation that will take place through the cloth.

Honey-Dew Stores—Transferring.

In July I bought one colony of bees in a box-hive, which I brought home. They filled the box with honey, which is about 50 pounds, and it is almost entirely stored from honey-dew. I have also 3 other colonies in sections of trees, which are as well supplied with honey as the box-hive, but also stored from honey-dew. Now the trouble is this: Since they have begun to live on their stores they are dying—more so in the box-hive than in the logs.

1. Do you think it is the honey-dew that is killing them? If you think it is, then I can explain why they are dying more in the box-hive than in the tree-sections—those in the logs were left about two miles from here this summer, where they had a wet meadow where there were some fall flowers, and they gathered about ⅛ of their stores from boneset and mint.

2. Can I transfer them to frame hives on empty combs, and feed sugar syrup, doing the work in a good cellar? or is it too late to transfer at this time of year?

Ridgeway, Wis., Nov. 19. H. K.

ANSWERS. — 1. Honey-dew has the credit of having proved fatal to bees in repeated instances, and it is quite possible that your bees are suffering thereby.

2. It is a bad time of the year to transfer, and if they were transferred they might be no better off to have syrup than the honey-dew. Not but what syrup is better than honey-dew, but it is not safe to feed it generally in winter. If they could fly often enough, they might come through all right, but it is not likely the winter will be warm enough for that. I'll tell you what you can do: You can make candy in cakes such as described by Pres. Abbott at the St. Joseph convention, and put it over the frames. The bees will feed at least partly on that, and will probably come through all right. [See page 760.—ED.]

"Warranted Purely Mated" Queens.

I bought a 5-banded Italian queen, warranted purely mated, and the bees that came with her were good looking bees. I introduced her all safe, and she was a "dandy" for laying, for in a week she had almost 3 frames full of eggs; but when they came out to have their flight, I must say that I was surprised for they were almost all black. Now, did the breeder mean by saying "purely mated" that it was by a black drone? I did not take it that way, but if that is the game, I don't want anything to do with bee-keepers of that style. A. E.

ANSWER. — An Italian queen, warranted purely mated, would certainly not be understood to be mated with anything but a full-blooded Italian drone. But she may have mated with a black

drone, and nothing wrong on the part of the man that sold you the queen. You see you didn't buy a tested queen—only "warranted." A warranted queen may be one about whose progeny the seller knows nothing, but as most of his queens are purely mated he feels safe in warranting one that he sends off, without testing, which is equivalent to saying, "I don't know for certain about her, but I warrant her to be purely mated, and if she turns out otherwise I agree to replace her with one that is purely mated." If there is no mistake on your part, I think you will find the breeder ready to replace a warranted queen that doesn't turn out to be purely mated.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Caring for Bees in the South.

During winter in the South, as we are constantly adding beginners to our ranks, it is necessary that we should occasionally go over old grounds, and as winter is now upon us, I think it will be a good idea to rehearse winter and spring management in the South.

In warm countries it is not so essential that we look so closely to see that each and every colony has an abundance of stores. As our bees fly almost daily, it will not hurt them to open the hives and examine them at any time during the winter. As the bees do not often cluster or draw up in a compact body to keep warm, hence it does not hurt to open the hives.

One of the main things to do is to see that robber bees do not take the weak ones, as we are troubled more with robbers than in the North, and as our bees fly so much more during winter when no honey is to be had. Contract the entrances against mice and robbers. See that the bees do not run out of honey, and they usually pull through the winter all right.

But as soon as pollen begins coming in, in the spring, the queens usually begin laying fast, and when the weather continues good, the bees will have a hive jam full of bees and brood, and their stores will disappear almost like magic. And unless you *know* you are likely to have a honey-flow that will justify you to have strong colonies at this early date to use these bees in the fields, it is a loss to the owner, and I would stop such increase and waste of honey, even if I had to cage the queens to do it, for it is absolutely a total loss to rear bees out of season, unless we can sell the bees, and these instructions are for the honey-producer and not the bee-merchant. I would not allow the bees to run lower than 5 pounds of honey, or as near as we can guess at it, at any time, as a rainy day or two might run then clear out of honey, and cause the bees to pull out their young and throw it away; and this is another big loss to the owner, especially if that brood would come in at a time when they would be needed to gather a harvest.

Now these very points that I have given are the very essentials in successful bee-keeping, and right there is where *so many* fail to secure a crop of honey, while a next door neighbor gets a fair crop. So I will ask you to look well that your bees do not suffer from the the disease of negligence, and you will likely always come out on top.

JENNIE ATCHLEY.

The Beeville Bee-Convention.

In the Beeville Bee—one of our local newspapers—the following was published on Nov. 23:

BEE-KEEPERS' CONVENTION.

Mrs. Jennie Atchley, of this city, has called a midwinter bee-convention, which will be in session here Dec. 27 and 28. There will be delegates in attendance from all over the Union, and their number will aggregate some 300 or more. These delegates, who will be representative citizens from their respective States and localities, will no doubt be agreeably surprised with our sunny climate, and those who do not decide to permanently locate here (which doubtless many will conclude to do), will go away singing the praises of sunny southwest Texas.

These conventions have been held annually for the past 25 years, and it has been the usual custom, wherever they are called, to furnish the delegates free accommodations, which, we believe, is usually done by the local residents throwing open their doors to the guests, as is often done on the occasion of other conventions. As the delegates to this convention will be of the highest moral character, we suggest that the citizens of Beeville manifest their usual Southern hospitality by entertaining these distinguished guests in the best manner possible. OLD CITIZEN.

Delegates or representatives will be called on to rise and represent their several States. Now, let us have every State in the Union well represented. Remember, no hotel bills at bee-meetings in *Texas!* And if you don't visit Sunny Southland, and the midwinter bee-meeting, you may have cause to regret it. There will be free dinners on the ground both days, so that the people will not have to disperse; and free supper, lodgings and breakfast at our good and generous people's homes. Come one, come all, and see how royally we can treat you. JENNIE ATCHLEY.

Some Notes and Comments.

A stroll among Brazoria county bee-keepers will be written up for this department soon, and many interesting facts given, and some surprises to people not acquainted with that part of south Texas. Look for it. It will benefit you to read it.

We are still having beautiful spring-like weather, and the birds and bees are yet happy that they are permitted to enjoy our balmy air and our almost perpetual sunshine.

If you don't come to our midwinter bee-meeting you will lose a treat, and you may have cause to regret it. So get the consent of your mind now, and come.

Mr. Stevens, of South Dakota, arrived here with his bees and household effects last week, and will make Bee county his future home. He brought 50 colonies of nice Italian bees. He also brought with him Mr. Pennel and family, and all are delighted with our climate.

Those coming to the bee-meeting and wishing to remain a few days after, to look at the country, will do well to make it known to me while at the meeting, as special hotel rates and private conveyances will be secured for you, that will save you unnecessary expense.

I wish to *especially* call the attention of my lady bee-friends to our midwinter bee-meeting on Dec. 27 and 28. Everybody come, so as to arrive here Dec. 26, that we may have a full attendance both days. Our arrangement committee will meet you at either train on Dec. 26 and 27. If you arrive on the Southern Pacific the hour is 4:45 p.m., and on the Aransas Pass it is at 6 o'clock p.m. Our hacks and buggies will meet both these trains Dec. 26 and 27 only. Should you arrive before or after these dates, it will be necessary that you drop me a card to that effect, otherwise you might have to walk out.

JENNIE ATCHLEY.

Answers to Your Questions.

Friends, should you not get an answer at once to your questions pertaining to bees, or other matters, through the American Bee Journal or by letter, you may *know* that I have not yet come to them, as I let them come in by turn usually. But *all* your questions will be answered as intelligently as I know how, and as soon as I can *possibly* reach them. Some become impatient when their answers do not come at once. Please do not worry about it, but rest assured that your answers will come.

JENNIE ATCHLEY.

Visiting Bee-Keepers.

We have lately been visiting the bee-keepers of Brazoria county in this State. We find lots of large apiarists through that county that the bee-keeping public know nothing about. This county lies about 150 miles northeast of Beeville, and borders on the Gulf Coast. While bees usually do well in Brazoria county, this year they had nearly two months of perpetual rain in July, August, and September, and no honey was gathered of any consequence, and what was taken is of a very low grade, and hardly fit for table use. They get some white bass-wood honey there, when the weather is favorable.

The honey that is gathered in these lowland counties, especially along the river bottoms, is usually a dark amber

honey, outside of the linden; while back in the interior, and where it is hilly and rolling, like Bee county, we get just as much honey as they get in Brazoria county, and all white honey, and of fine flavor and quality. Bees that we examined through the eastern counties are mostly in fine condition for winter. But one mistake I think the people are making, is in not Italianizing their bees, as nearly all the bees found in Brazoria county, except a few apiaries, are the common black bees.

JENNIE ATCHLEY.

Motherwort—Dry Weather.

MRS. ATCHLEY:—I send you by this mail some motherwort seed. It blooms from August until frost; the last bloomed here Nov. 1.

My bees are in splendid condition for winter. It is very dry here in this part of Kentucky. We have to drive our stock two miles to water. Our springs are all drying up, and we just get rain enough to keep small grain alive. I like your lessons very much in the American Bee Journal; but would like them better if they came every week. It is now cold—away below zero.

J. W. CRUTCHER.

Jett, Ky., Nov. 19.

Friend C., I wish to thank you for the motherwort seed. I shall try it here, and if it grows and does well, I will report it through the American Bee Journal.

It makes me almost shiver to hear you say it is below zero, while we have had no frost yet to kill our garden stuff. We have snap-beans right off the vines now. It is dry here, too—no rain for two months, but that is common here, and nothing is thought of it. Water is plentiful here everywhere.

JENNIE ATCHLEY.

Old Bee Journals.—We have quite a number of old copies of the American Bee Journal, extending back perphaps 10 years. We will send these out at *one cent a copy*, all to be different dates, and back of Jan. 1, 1894. Remember they are *odd* numbers, and you must let us select them. We cannot furnish them in regular order, that is, one or two months' numbers without a break, but will mail you as many single or odd copies as you may wish, upon receipt of the number of cents you want to invest in them. They will be fine reading for the long winter evenings, and many a single copy is worth a whole years' subscription. Better send for ten or more copies, as a sample order. Only a cent a copy, *back* of Jan. 1, 1894.

Granulated or Brown Sugar for Spring Feeding?

Query 952.—Taking into account the different cost, is it better to use granulated or brown sugar for spring feeding?—Iowa.

Granulated.—J. A. GREEN.

Granulated.—J. P. H. BROWN.

"I don't know."—JAS. A. STONE.

I prefer granulated.—B. TAYLOR.

Granulated sugar.—DADANT & SON.

I use granulated.—G. M. DOOLITTLE.

Granulated, I think.—W. G. LARRABEE.

Whichever is the cheaper.—J. M. HAMBAUGH.

I should rather risk the granulated.—S. I. FREEBORN.

I always use granulated sugar when obliged to feed.—H. D. CUTTING.

I've always used granulated, so I never had a chance to compare.—C. C. MILLER.

I think that granulated sugar is the cheaper and better at all times.—EMERSON T. ABBOTT.

I don't know. I never used the latter for that purpose. Suppose you try both.—EUGENE SECOR.

We feed granulated, and think it enough better to make up the difference in price.—E. FRANCE.

I would not use granulated at all. I would use a fair article of white sugar, A or C coffee.—M. MAHIN.

I think granulated sugar is the cheapest, as well as the best, for bee-feed at any time.—C. H. DIBBERN.

Neither, in this locality. I cannot tell which is best, but I think there is not much difference.—P. H. ELWOOD.

I do not know. Why not use granulated sugar and cheap honey, half and half? I have been doing this in California.—A. J. COOK.

I use the common brown sugar, and like it best. It comes right from the open pans or kettles, and is not refined

or adulterated. At least not here, where it is made, and we get 24 pounds for a dollar, which makes a cheap food.—MRS. JENNIE ATCHLEY.

I never experimented along that line, but I should think the brown sugar was less adulterated than the granulated.—MRS. L. HARRISON.

Granulated; for while it is a trifle higher in price, it is not so damp, and you get more sweetness per pound.—MRS. J. N. HEATER.

Brown, or unrefined sugar, is the best for brood-rearing if the weather is warm enough for the bees to fly out at their good pleasure.—G. W. DEMAREE.

I always use and prefer the granulated, and it is about as cheap, I think, all things considered, though I have not tried the brown sugar.—R. L. TAYLOR.

Granulated sugar, by all means, at present prices. One pound of granulated sugar will make more syrup of a given thickness than a pound of brown sugar or coffee sugar.—G. L. TINKER.

I should use granulated sugar in all cases. Taking into consideration the difference in quality, the granulated is the cheaper at the higher cost, whether used in the apiary, the kitchen, or the dining room.—J. E. POND.

I would prefer the best granulated. We cannot afford to run any risk in a matter of this importance. If it is worth doing at all, it is worth doing well. Feeding at best is an unfortunate necessity, especially in the spring. If once commenced, it must be continued until well along into the season. If abruptly discontinued, before honey is obtainable, the bees are likely to tear out and destroy all brood started; and this will put them back to a worse condition than before—a process that will naturally affect and detract from their vigorous and healthy condition. Be cautious.—W. M. BARNUM.

The Amateur Bee-Keeper is the name of a neat 64-page pamphlet, 4x7 inches in size. It is written by that practical Missouri bee-keeper, Mr. J. W. Rouse, and published by the Leahy Mfg. Co. It should be read by every bee-keeper, whether an amateur or not. A new and second edition has just been issued, the first 1,000 copies being disposed of in only two years. It is nicely and fully illustrated. Price, postpaid, 25 cents; or clubbed with the American Bee Journal for a year—both, $1.15.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Dec. 18, 19.—Northern Illinois, at Rockford, Ill. B. Kennedy, Sec., New Milford, Ill.

Dec. 26, 27.—Eastern Iowa, at Anamosa, Iowa Frank Coverdale, Sec., Welton, Iowa.

Dec. 27, 28.—Texas State, at Beeville, Tex. Mrs. Jennie Atchley, Beeville, Tex.

1895.

Jan. 2, 3.—Michigan State, at Detroit, Mich. W. Z. Hutchinson, Sec., Flint, Mich.

Jan. 9.—Indiana State, at Indianapolis, Ind. Walter S. Pouder, Pres., Indianapolis, Ind.

Jan. 21, 22.—Colorada State, at Denver, Colo. H. Knight, Sec., Littleton, Colo.

Jan. 22-24.—Ontario, at Stratford, Ont. W. Couse, Sec., Streetville, Ont.

Jan. 28.—Venango Co., at Franklin, Pa. C. S. Pizer, Sec., Franklin, Pa.

Jan. 30, 31.—Vermont, at Middlebury, Vt. H. W. Scott, Sec., Barre, Vt.

Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.

——, ——.—North American, at Toronto, Can. Frank Benton, Sec., U. S. Dept. Agriculture, Washington, D. C.

☞ In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

OFFICERS FOR 1895.

PRES.—R. F. Holtermann.....Brantford, Ont.
VICE-PRES.—L. D. Stilson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson...Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor...Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill. 147 South Western Avenue.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 736 for advertising offer.

WINTERING BEES IN THE CELLAR.

BY C. DAVENPORT.

I would like to say that the editor selected the title to my former article, on page 658, and I notice he refers to me as a "big bee-man;" now I have some pretty big bees, but I am not very big myself—I am just middling-sized!

This time I will try to say something more about wintering bees in cellars, for successful wintering, to most of us in the Northern and Middle States, is one of the most difficult problems we have in our chosen, and, to me, beloved pursuit.

In the first place, in carrying the bees into the cellar, I regard it as very important that they are disturbed as little as possible in the operation. If a colony is disturbed enough so that the bees become alarmed, they will fill themselves with honey, or syrup, and they start into their long confinement under very unfavorable conditions. The hive bottom-boards should be loosened the day before, or in the morning of the day they are to be carried in. I loosen the covers at the same time, and do both as carefully as I can, so that the jar and snapping which is found to take place more or less will disturb them as little as possible. If they are carried in at the time this is done, they are much more apt to become alarmed, for in loosening the bottom-boards they are sure to be disturbed some, but not enough but what they will soon quiet down with no harm done, if that is all that happens to them at the time.

For a long time carrying bees in and out of the cellar was about the hardest and most unpleasant work I found about bee-keeping. But a number of years ago I made a carrier for this purpose, which makes the work much easier, and disturbs the bees less than any plan I ever tried, and I have tried a good many. To make one of these carriers, take two pieces of 2x4 scantling, about 5½ feet long. Lay them on the ground edgewise, about two feet apart, and nail across them three narrow pieces of boards, so that two hives will set on these strips lengthwise of the 2x4. The middle strip should be a little wider than those at the ends, as one end of both hives will set on this middle board. Near each corner nail a narrow piece of board 6 or 8 inches long for legs. The ends of the 2x4 should be shaved down small enough so that a man can take hold of them like the handles of a wheelbarrow—only have one man at each end.

On the strips that the hives rest on, and on the bottom of each leg, I nail some pieces of old felt-cloth—an old felt hat is just the thing, or any pieces of thick cloth. This is done to avoid all jars in placing the hives on the carrier, and in setting it down on the cellar bottom.

With this carrier two men will carry two hives a great deal easier, and disturb the bees less, than each man can carry a hive in his arms. I carry most of my hives

in without the bottom-boards, and on a cloudy day, with the temperature at 45°, or a little lower, this can be done, and the bees hardly seem to know they are being moved. But I would say to those who carry their hives in with the bottom-boards on, you will like one of these carriers even better than those who do not leave the bottoms, as a hive with the bottom-board on is more awkward to carry in one's arms than one without. One of these carriers only costs a few cents, and any one can make it in a few minutes.

As to the time for putting the bees in, it varies with me from the first to the last of November, though it is not usual later than the middle of the month. This year part of my bees were carried in on Nov. 7, and the rest on the 13th.

In the cellar I place the hives on two pieces of 4x4, which are placed about 10 inches apart, and supported about a foot from the cellar bottom. The hives are set on these pieces without the bottom-boards, and about 5 inches of space is left between each hive, and the next tier of hives is set over these 5-inch spaces, and so on up. I have tried putting the hives on the cellar bottom, and almost always with poor results to the colonies comprising the lower tiers. Of course it does not matter whether the hives are placed and tiered like this or not; if they are up from the cellar bottom, and have plenty of bottom ventilation, they are all right as far as that is concerned.

I always loosen the covers. I do not put anything under them to hold them up, but if they are loosened just before they are put into the cellar, there will be a slight top ventilation which has always given the best results with me.

If there is a warm day any time during the winter, when the bees can fly, I always carry some of my most choice colonies out, and let them have a good flight. I take one of the carriers into the cellar, and place a couple of bottom-boards on it, and set a hive on each one, and they can be carried out very easily. I do not regard this as necessary, but I think it is a good thing to do, as it gives the bees a chance to relieve themselves; and I have noticed that colonies thus treated seem to be stronger in the spring, and less likely to spring dwindle.

If the bees are carried out for a flight, the hives should be set in the same places from which they were removed in the fall. For marking the location of each hive, I take a bunch of lath, and saw them up into foot lengths, sharpen one end, and drive a piece down by the side of each hive, and on this I write the number of the hive by which it is set. I have never had any trouble to speak of with bees mixing up and entering the wrong hives, as described by Mr. Dadant in a late number of the American Bee Journal.

Now there is another thing that I know is very important in cellar-wintering, and that is plenty of fresh air, or, in other words, good ventilation. Thirteen years ago last spring I bought 6 colonies, and started at the business in which I have been actively engaged ever since. In the fall I had 13 colonies which I now know were in good condition. Late in the fall they were put into the house-cellar, one end of which had been partitioned off for their use. The preceding summer I had read an article in which the author very positively stated that bees did not need any air during the winter, so after they were put in I banked the outside door up with straw and earth, and shut both windows tight. The walls of this cellar were thick, composed of hard limestone well laid in mortar; and the inside was also plastered with two coats of good mortar. Now, good authorities tell us that air will get through such a wall as this; I am not going to dispute them, but I will say that there cannot enough get through. In the spring 11 of those 13 colonies were dead, and another died soon after they were put out. Those bees were killed by foul air. They did not die because the cellar became too warm. Bees have been wintered very successfully in a higher temperature with pure air, than that cellar

reached. I have wintered hundreds of colonies in the same cellar since, but I gave them plenty of air.

I will never forget the bitter disappointment I felt over the loss of those bees that first winter; but I had faith in the business, and also what at that time I regarded as much better—a young horse which my father had given to me when it was a colt; this I sold, and invested all the proceeds in bees, hives and bee-books, and as a rule, since, I have had good luck.

There are other things and conditions which make our success in wintering to vary, and unfortunately some of these are very hard, or impossible, for us to control. But I know from a good deal of experience that it is much better for the temperature to go considerably lower than the prescribed limits of 45° and 48°, than to keep it at that by means of foul air, or air that has been breathed and re-breathed by the bees.

Now, I do not want any who winter their bees in house-cellars, and have to give ventilation by means of windows, to think it is necessary to have two windows open at once—a continuous direct draft is to be avoided, if possible; one window partly or wholly open will usually be sufficient. No exact rule can be given, as it will vary with the size of cellar, number of colonies, etc.; but I will say that if the air where your bees are confined is such that you would not like to breathe it very long yourself, you may be very sure the bees won't like it very well either. I try to keep the air in both of my bee-cellars so that I would not mind staying there all the time myself, as far as the air is concerned. Southern Minnesota, Nov. 7.

SOMETHING ABOUT FRAME TOP-BARS.

BY PHILO S. DILWORTH.

When the wider and thicker top-bar craze was in full blast, I used all my influence against jumping to the saw-log top-bar at once. I urged a gradual increase until we would find just how much increase was necessary. The old style of top-bars were ⅞-inch wide. The tin corner bars were about ¼ thick, and the all-wood frames were ⅜ thick. I begged that the increase the first year should be to 1 inch wide and ⅜ thick, and spaced ⅜ exact. I had so much confidence in my idea that I ordered some made that way on a special order. Up to this time I have no reason to regret my order. If you have any old-style slatted honey-boards, you will probably find the slats one inch wide, and spaced ⅜. Probably you always supposed the reason the bees built no burr-combs above the honey-board was, in some mysterious way, on account of the double arrangement. Look again, and see if you don't think the cause was the width of the top-bars, the ⅜ bee-space, the small space between the slats and the supers, and because of no sagging. Then give my top-bars a trial in a few hives.

To put my top-bars on the old-style all-wood frames is a small matter, even with the old combs in them. I do not know of any better way to transfer the combs than to simply change the top-bars. If your supply-dealer has not these bars, he can get a sample from me to use as a pattern to make yours. This article refers to swinging frames. I use Root's old-style wiring with tin bars in the middle. I flatten the tin bars and wax them to get the bees to build worker-cells on them. I try to get my foundation started by colonies known to be good comb-builders.

Some bees are better comb-builders than others. Some bees seem to have a natural propensity to mutilate foundation or partly-drawn combs. Some seem to require bait sections to get them to work in the supers. Others seem glad to go into the supers as soon as they have anything to go with. My plan is to supersede all

queens whose bees will not go into the sections without baits. I also supersede queens that swarm out from under empty sections, if I can find no cause except "won't build comb."

After-swarming is another bad trait that should be bred out as rapidly as possible. The most prolific queen is not always the most profitable queen. Most of my knowledge in the bee-business has been gained by laborious, painful and costly experience. My articles are not the rehash of other people's ideas. They are based on my experience. Allegheny Co., Pa.

LARGE OR SMALL HIVES—OTHER "KINKS."

BY O. G. RISLOW.

Say, will you who are trying to pull Dr. Miller off from the fence, leave him alone, and let him sit there until he gets off himself, even if it will take him a long time? Large hives, as well as small hives, will never become standard hives, viz.: a hive that all can use to the best advantage. A small hive will be best for one locality, and a large hive for another. One has to decide what hive is best for his locality. What we ought to discuss, and try to agree on, is a standard frame all over the United States; then we could have large or small hives, as we thought best.

THE SEASON'S REPORTS.—Some write: "I got a fine crop of honey." Or, "We have had a fair honey season in this locality," etc. Why not say how many pounds per colony, spring count, and what increase; what source they got the honey from, etc.? That is nearly as easily done for a practical bee-keeper as merely stating as aforesaid.

READING ESSAYS.—What is the use of reading essays at the North American Bee-Keepers' Association when we can just as well sit down at home and read them, without spending a cent for it. If it ever comes that I have a chance to be at the convention, I would not care for such reading. Bee-talk is what we want, and then some sort of recreation, or recess, and then bee-talk again.

BEAUTY VS. QUALITY.—Nearly everybody seems to be crazy after Italian bees, and particularly those 5-banded bees, as they are so pretty. Well, that is as far as they go, as they are bred more for beauty than for good qualities, at least such is my experience. Those that I have are worse than hybrids to handle, and not better than blacks to work. I have a daughter of an imported queen, and they are the best in every way—better to handle and better workers.

REPORT FOR THE SEASON.—The honey crop in this locality was poor. Spring opened very favorably, bees bred up very fast, and the hives were crowded with brood the middle of May, when that hard frost came and killed nearly half of the brood, and continued cold for some time, which was a great drawback to brood-rearing. White clover was winter-killed so badly that hardly anything was left, and what little there was yielded no nectar. After the first week of June there was no rain until the middle of September. Sumac yielded some, and after that basswood yielded well for a week, and that was all the white honey I got. There was a fair yield from fall flowers, which I got most of my honey from—mostly golden-rod honey.

I had 16 colonies, spring count, running 14 for comb honey, and increased all to 30 strong colonies. I got 758 pounds of comb honey, mostly dark, and the bees have enough to winter on. Lake Mills, Iowa, Nov. 12.

PROCEEDINGS

OF THE

Twenty-Fifth Annual Meeting

OF THE

NORTH AMERICAN BEE-KEEPERS' ASSOCIATION.

BY FRANK BENTON, SEC.

[Continued from page 726.]

SECOND DAY—FORENOON SESSION.

The Association met at 9 a.m., and President Abbott appointed the following committees:

Committee on Revision of Constitution—George W. York, A. I. Root, W. Z. Hutchinson, Dr. C. C. Miller and Frank Benton.

Committee on Resolutions—Dr. F. L. Peiro, George W. York and L. D. Stilson.

Committee of Reception—R. F. Holtermann, Mrs. J. M. Null, Dr. F. L. Peiro, E. Whitcomb and A. I. Root.

Auditing Committee—W. Z. Hutchinson, C. P. Dadant and E. Whitcomb.

Committee on Exhibits—H. J. Newberry, E. C. L. Larch and E. L. Carrington.

On motion of Mr. C. P. Dadant, the time for the selection of place of meeting for 1895 and the election of officers was changed from Oct. 12 to the afternoon of Oct. 11.

A place on the program had been requested for a meeting of the Missouri State Bee-Keepers' Association, but as that society failed to fill it, the following essay by Mr. George W. York was listened to:

Disposing of the Honey Crop.

Page upon page has been written on the subject of marketing honey, for all realize that unless it is well sold, there is no profit or just remuneration for the labor and skill involved in its production.

A successful marketing of honey presupposes its good quality, and suitable condition for proper and satisfactory handling. Possessing these two very important factors, the honey is then ready to seek the much-desired customer.

Upon what market shall it be placed? Aye, that's the question! Shall it be disposed of in the home market—probably among the producer's friends and neighbors—or shall it be shipped to the nearest large city to find purchasers? Both ways have their advantages, as well as disadvantages. So much depends upon the producer himself, that what might be best for one bee-keeper would be all wrong for another equally successful in honey-production.

Each producer, of course, desires to realize the most money possible for his crop. Upon that point all will agree. But how about the *city* market for such an object? The city honey commission merchant, as a rule, if he does any business at all, is an overworked or overcrowded man. Imagine, if you please, 100 different lots of honey, being shipped to him from various parts of the country, in different conditions, and all coming so as to be in stock at the same time. Now it will be utterly impossible for him to give to each shipment equal attention, and some of them must of necessity be neglected, or await their turns. In the meantime, some of the shippers may notify him to hold their honey for a certain price. Then, of course, the honey of those who do not give any definite instructions as to price will be sold first, and probably at a lower figure. By that time the market is practically supplied, and the balance of the honey in the commission merchant's hands must be held, or the price lowered in order to at all effect sales. Thus it will be readily seen that at best selling through a city commission firm must often be quite unsatisfactory, especially as there is so much to risk in shipping honey, lest the combs be broken down and thus be ruined, or the extracted honey packages may leak, and in that way cause loss.

I fully believe that the best solution of the question will be found in the home market, where the producer can personally look after the details of the work; and although unable to do the actual retailing himself, he can so supervise it as to realize the largest proceeds from the sale of his crop of honey.

Of course, it requires a good talker to sell honey, as well as anything else that has merit which needs to be shown to the desired purchasers. But as nearly everybody likes to eat honey, it should not be such a difficult task to dispose of some in nearly every home visited.

As to the price to be asked, certainly the city market quotations should not govern, for, as I have shown, that market may have become overstocked, and for the time being the price lowered to such an extent that there could be no profit whatever to the producer.

It has been suggested that unless a good price be asked, it will not be secured. And there is more truth than poetry in that hint. Though if the price asked be too high, there will also be less sales, and consequently less money obtained but more honey left on the producer's hands. It seems to me that comb honey, in most home markets, should bring not less than 20 cents per single section, or 6 sections for $1.00. Extracted honey should retail, per single pound, at 15 cents, or 8 pounds for $1.00. These prices certainly are not high, and yet probably large enough to sufficiently reward any reasonable producer in a fair honey season.

There is much in education in this matter of the price of honey, as well as to its constant use in the family. By starting out *rightly*, a better price can be secured and maintained, and also more sales be made, while if there is a wrong beginning, it will be well nigh impossible to correct it later on. By all means study the consumer's ability to pay, supply a pure article of honey, put up in an attractive form, and there will be little trouble about future orders after the first purchase is made and used.

I think that bee-keepers who have a home market well worked up often make a very great mistake when they allow themselves to get out of honey for sale at any time of the year; for if a regular customer can get no more honey from the producer who has been supplying him, he will likely apply to the grocery store, where he may be supplied with a mixed article at a less price, and also correspondingly inferior in quality, though it may, after a time, give partial satisfaction. The result will be that the next time the honest producer wishes to sell that customer more honey, he will be expected to furnish it at very near "store prices," for a superior article. To avoid such an unfortunate condition of things, I would always have honey on hand, even if it be necessary to get it from a bee-keeper at a distance, but always being assured of his honesty and reliability.

I am sure that the home market for honey has undreamed of possibilities for successful development, and the wide-awake, progressive twentieth century honey-producers will find in it a veritable gold-mine in exchange for their pure, golden honey—nectar fit for the gods, and hungry humanity's best food and medicine. GEORGE W. YORK.

Mr. York's essay was then discussed as follows:

R. F. Holtermann—I should like to have this convention discuss one subject, and that is, whether a producer should ever get out of honey, or whether he should buy from other producers to fill the demand he may have.

F. H. Richardson—No sir-ree! I would not do that. I would sell only my own honey. I would not sell any that was not mine and say it was.

Mr. York—You would not have to do that. All we have to do is to guarantee the honey to be pure honey. I don't have to produce the honey myself. We don't have to do that.

C. P. Dadant—We have found that we have had to handle honey that was not our own. When the crop was short we found that it was very easy to sell honey that was not our own, by putting our label on it. We tell them it is not our own honey, but when they see our label on it they take it as soon as they would our own. If they would not see our label on it, they would think we had "manufactured" it. If we tell them that we will guarantee it, it is all right. It is sufficient for them if we will guarantee it.

Pres. Abbott—I have been compelled to sell Dadant's honey.

Dr. Miller—I think it is a good thing in two respects. When a bee-keeper has more honey than he needs, and one has less than he needs and buys it, then it is a good thing. There is one thing that I want to speak about right here, and that is in regard to the price of honey. Some sell it for 20 cents a section. The supply and demand is going to rule. In one place the price is 15 cents, and in another place 20 cents. We may as well give up if we attempt to fix any price on honey. We will do harm rather than good.

Mr. York—My essay reads that most home markets should *not* bring *less* than 20 cents.

Dr. F. L. Peiro—Mr. Richardson tells me something which is entirely new to me, and that is the fact that a man can lie without saying anything. In Chicago we do a good deal of lying, and I am going to find out just how he does that fine-haired thing!

Pres. Abbott—I have had a little experience in this honey-selling business. I have lived in St. Joseph for ten years. The first four or five I did a good deal by way of selling my own honey, but I have seldom had honey enough to supply the demand when I have pushed the business. For the last two or three years I have tried not to sell rather than sell. During that time I have been able

to build up a market that is of a character which every man should have—a market that simply takes my word for it because they think I know what honey is. They never ask me if I produce the honey. If they would, I would tell them no. They don't ask it, because they have become acquainted with me, and they know when I sell them honey that I know what honey is, and they take it for granted that I would give them a good article, or I would not bring it to them at all. I have never sold a pound of honey in St. Joseph (except two or three times when I made a reduction on the ground of friendship) for less than 15 cents per pound. I know people who have gone around these streets begging people to buy honey at 7 or 8 cents. The reason I got 15 cents was because I asked 15 cents, and I do not handle anything else than 15-cent honey. If they want honey for less than 15 cents, they buy it of somebody else. If they do not pay me 15 cents for it, they do not get it. If the dealers who are handling my honey are willing to pay me 15 cents for it, I leave it, but if they are not, I take the honey away. I always sell for cash, and if they do not want to pay me cash for it, I take it away, even if they are worth a million dollars. That is the way I do business, and that is the way everybody should do. I believe it can be done, and that is my experience. I do not say anything about this market, because others would rush in here and sell all the honey and get rich.

Mr. Richardson—My customers, as I explained, don't ask about the honey. When I take it to them that settles it, and at wholesale I get 12½ cents per pound. I don't always get the money before I leave the store, because I sell only to responsible parties—12½ cents for extracted to the dealers, and 15 cents at retail. I have never sold a pound of comb honey for less than 18 cents wholesale, and 20 cents retail. I think it is right that I should give the men who handle my honey the advantage in price—that is, the men who handle my honey in the stores. When a stranger comes to my home for honey, and if I have never sold him any honey before, he will always ask if this honey is produced by myself. If it is not it would not be right for me to tell him it is. I claim if it is labeled, or not, it would not be true. I tell them: "Here is honey, and I guarantee it in every respect equal to my honey;" so my conscience is clear, and my customer is satisfied.

Mr. Holtermann—I think the bee-papers should be censured for giving the prices of honey they do. We in Canada have wholesale 12½ cents and retail 15 cents for extracted, and these are the prices which we get. I think there is a good deal of truth in what has been said here. Mr. Muth said that a man came to him and got some honey, and then went around and asked people if they did not want some good country honey. The people caught at the words "country honey," and the man got 15 cents for his extracted honey, and by that custom got to have quite a good trade on it simply because he supplied a good article. The words "country honey" pleased them, and he got a good price for it. I think Mr. York's idea is a good one—to get honey from elsewhere when a man runs out, but get a good article always, and if you cannot get a good article always, do not handle it. If the article used is good, we will be able to build up a good trade. A man has an idea if he pays a little higher price it is more likely to be pure. I think it is best to establish our own reputation in that way.

Dr. Miller—There has been as much harm done to our market by having a poor article of honey on the market as by anything else.

E. Whitcomb—While I regard the home market as much the best, I don't think it is a good idea for a man to force his honey on the market. I have allowed myself to be beaten once, but not the second time. I have never shipped any honey to commission men but once. If I sell honey it is sold before it is shipped. A few years ago I went West and picked out a good groceryman, and I said to him, "Mr. So-and-So, what kind of honey are you selling?" He said "California." I said, "Well, I have some good honey." He replied, "We can't sell your honey." I said that I would like to send him some honey, and I asked him if I could pick out a window in his place where his customers would see the honey. He said that I could, and I said I would send him two or three cases of honey, "But mind, it is my honey, and it must be sold at my prices. If you sell it you must pay for it, and if it don't sell you don't have to pay anything." In a few days he asked for all of the honey that I had, and asked how much honey I had. We have no trouble in running the California honey out of our locality. I find that an attractive honey-package adds one-half to the sale of the honey. The manner in which you put it up is what sells it. That is what catches the eye of the buyer. Among our own buyers they

take our word for it, and they take the honey away in their own packages. That is the most profitable custom because you have no package to buy.

Mr. York—Before censuring Mr. Root for publishing the quotations which he does, I would like to hear from Mr. Calvert. What are you going to do with some bee-keepers who have honey to sell and are willing to take almost any price for it? The object of the honey market is to make for these men an outlet for their honey.

Mr. Richardson—I can partly, I believe, answer the brother. I believe if the honey quotation column was done away with, and in its place was opened a space that bee-keepers could advertise in the journals that they have honey for sale, it would be a good thing. There are always some bee-keepers that would have to buy honey to supply the home market. I pick up the American Bee Journal, and I see that Mr. Hutchinson, or somebody else, has a good crop, and I am short. I know him, and that he is reliable. If I want honey I will write to him and buy from him. I think that kind of space in our bee-papers would be good, and it would help us to a great extent.

A. I. Root—Perhaps our friend is not aware that we have had for years, free of charge, a space where any bee-keeper can tell what honey he has and the price for it. Now, in regard to sending honey to irresponsible men. There is a class of commission men (and if you do not have them in Missouri you are lucky), that will say, "I can give you 18 or 20 cents per pound for your honey;" and the man who gets the quotations is so excited that he rushes off and sends his honey to him when he don't even know him, and maybe has never heard of him. He says, "Oh, he is all right!" and does not give any other reason for it. We are employed by both Dun and Bradstreet to help them report honey-men. We could report every man in the United States that has anything to do with honey. If somebody asks you for honey and you can't readily find them, write us and we will be very glad to help you. A great part of our business is quoting and keeping track of bee-men, and we are inquired of a great deal, and I would be glad to have you inquire more, and you don't have to enclose any stamp. We try to encourage bee-men to be prompt and square, not only telling the truth by words, but by actions also. Honesty is the best policy. If you have any complaint, just give us the names and addresses of the men, and we will straighten them out.

Dr. Miller—About this matter of quotations in the bee-papers—a few years ago I spent some time in the city of Chicago going about to the offices of the daily papers that had certain quotations, and I went and took them returns from commission houses showing what I got for my honey, and it was in every case about 2 cents difference from what they were reporting in the papers. It is not an easy thing to have the correct quotations, either in the daily papers or in the bee-papers. We want information on this subject, and a certain amount of information, however small, is better than none at all. I would be very sorry in deed to put any kind of censure on the bee-papers for what they are telling about the state of the markets. If any one knows that the quotations are not correct, just send word to that effect, and in every case I have found the bee-papers would be glad to publish it. If you do not know that it is correct, it is something for you to go on; you have that much more to go on than if you did not have anything. They are likely to be correct. The bee-papers are doing the best they know how. There are times that those reports cannot be relied on. I have found at times that I was getting about 2 cents per pound from my commission men above the market reports. I would look at the reports and that honey was so much, and as I was getting 2 cents over that, I was satisfied. The fact is, we were all being lied to.

Mr. Holtermann—What I said I said in a sort of a joking way, but there is some truth in it. Honey is handled but very little through commission men in Canada. Just before I left home a man offered to sell us 2,000 pounds of honey, which he said was first-class, for 5 cents a pound. Now would it be wise for us to say in our journal that honey had been sold on our market for 5 or 6 cents? No. You take the daily papers, and you will find the price which is quoted is below what the price really is.

L. D. Stilson—In regard to this matter, I think it would be a good idea if you would look at it from the other side. A person who is producing good honey, as he should, and then sees what the difference in the prices is, he don't need to sell on the market where the price is so low. A gentleman in Indiana sent me a letter asking if any of our Nebraska bee-keepers had any honey to sell, and said, "If any of you have got any first-class honey to sell, I can get

you 6 cents per pound for it." I wrote back that we did not have to sell Nebraska honey for any 6 cents per pound, and that we did not produce that kind. A day or two later a telegram came to our station addressed to myself, or to some honey-dealer, and it was given to a merchant in town, as I live just outside of the town, offering him honey for 10 cents, saying that it was Nebraska honey. The man asked me if I knew this man in Indiana that is offering Nebraska honey for 10 cents. I said to him, "You take all the honey you can get at 10 cents, but it must be home-grown Nebraska honey, and your county honey at that." And he did so, and in a day or two he had a reply to that, and the man said that he could not supply the honey. We put our honey up in the neatest packages we know of, and we demand good prices, and we get them. We have no surplus to ship to your Eastern markets at those low prices.

H. C. Nichols—I have had some experience in shipping honey to commission men. I have shipped to Kansas City, Chicago and New York, and it was to men that advertised in the American Bee Journal or Gleanings. I shipped once to a man in Water Street, Chicago, and did not hear anything from it for a long time. I finally wrote to Mr. Newman, asking about such a man. I shipped some to Kansas City. I wrote to him asking what honey was worth, and he said it was worth 16 cents. I shipped it, and did not hear from it for a long time, and one day I happened to be down there and thought I would look around. I looked around before I said anything, and I found my honey with honey piled all around it, and there it had laid, and they had sold what came first. In shipping it, it was badly broken up and wasted. I try to create a home market, and sell a great deal to the home trade. I would rather take a little less price for it, for I know I will sell a great deal of honey in that way.

The Question-Box.

The question-box was then taken up, and the following questions discussed:

Extracted-Honey Packages.

Question No. 1.—"What is the most desirable honey-package?"

F. H. Richarson—I haven't much to say. I use for my extracted honey a sloping tin pail neatly labeled, on account of its being very convenient to handle, and by proper labeling you get a very neat package.

L. D. Stilson—I run for extracted honey entirely, and I put all of my honey up in glass. When a customer comes to get my honey I am not ashamed to hold it up to the light for him to look through. We use nothing but glass.

C. P. Dadant—I don't believe in that. Pure honey will granulate, and then you can't look through it.

Mr. Stilson—Whenever we put it up for customers, we put it in tin or wood. We never put it up for market until it is ready to be used.

Dr. Miller—There is no way in which honey looks so nice as in glass. Honey will granulate, and you will have to teach your customers that it is honey that can be depended upon, and then you will not have so much trouble with it.

J. T. Calvert—It is said that the sage honey of California must granulate to show that it is pure. I simply raise the question.

Dr. T. J. Conry—Alfalfa honey will granulate in a week.

W. L. Porter—I have used a tin pail, and have used a great many thousands of them in the last few years in Denver. We find that glass packages have a greater demand than the tin. I have a package here that I brought out of my stock, and that package has some advantages. We can put it in the stores to sell to our cumstomers, and we can offer 5 cents for the jar. If it is returned it is worth that to us, and if it does not come back it is worth that to the customer who gets it. I have used the square jars and the round jars, but I find that the square jar is not as valuable as the round one when the honey is used.

Mr. Richardson—Some of you say that all pure honey will granulate. I say that it won't. I have some honey that I have set out for two years, and last winter it was set out on the porch roof when the thermometer was 15° below zero, and I said to myself, "Now I will have some candied honey;" but when I came to get it there was no more sugar in it than when it came out of the hive. I do not put my honey in tin pails because I am ashamed of it, but I can't sell glass packages under any consideration. I bought some glass packages, and I had to almost give them away. I said to the people, "I thought you would like this glass package;" and they would say to me, "You can't sell me that honey for 5 cents a pound. We have had some of the honey that is put up in glass, and have found it always adulterated honey." I can't sell honey in glass packages at all; they won't have it. They have

learned that the packing-houses always put honey up in glass, and they always put in some comb honey. It may be glucose, and for that reason I can't sell glass packages to my customers. They want the honey in tin packages.

Mrs. Thos. Strawbridge—I find that the Mason jar is the most desirable package for my market. Tin was not a success in marketing my honey. I use the quart Mason jars.

E. Whitcomb—My home demand is for the one and two pound sizes. We tell them to bring back the jar or crock and we will give them 5 cents for it. The honey is 15 cents and the jar 5 cents, bring the package back and you will get your honey back.

Mrs. J. M. Null—I use the 60-pound cans—from the 60-pound size to the ½ gallon size in tin, and from the ½ pound glass self-sealer to the ½ gallon self-sealer, for extracted honey.

Bee-Paralysis.

Question No. 2.—"Has any member present had any experience with bee-paralysis, and has he anything new to offer in explanation of the disease, or in the way of practical remedies?"

A. I. Root—I made the first mention of that disease. I did not know of anything better, so I named it that. I thought once that I had discovered a remedy by destroying the queen and putting in a different one, but I have since learned that that does not do it. Prof. Cook says that the disease appeared in Michigan, and he thought it was the queen.

Dr. Miller—I had that disease myself—or rather my bees did—and I painted my shop red and my bees got well. I don't think that it was the painting of the shop that did it. So far as I can see I don't think you will find it in the North here to any very great extent. I do not know that I have seen any reports of it here, but I think if you will let it alone it will take care of itself. In the South it becomes very bad, and the question is whether any of these reports of a cure have anything to do with it at all. I don't think we know anything more about it than we did before. Some one's bees has the disease and he changes the queen, and the bees get over it, and he says changing the queen did it. My bees had the disease, and I painted my shop red and the bees got over it, and I have just as good a right to say the red paint caused the cure as you have to say that the change of the queens did it. I don't think we know any more about it now than we did at first, and I don't think we need to trouble ourselves about it. I believe it will take care of itself.

Mr. Dadant—I would like to ask if anybody can tell the difference between that and bee-constipation. They come at the same time of the year.

Mr. Holtermann—Some say it is from starved brood. I would like to see a case of it, and see what it is like.

Mr. Whitcomb—I have never seen but one or two cases of this disease. In one case I thought I would change the queen and introduce a new one. The queen that I took out looked so fine that I really disliked to destroy her, and I started a new colony, and I never had any more trouble with her. Another case I had was where they got at some fly-poison that a neighbor had put out. In nearly every case I have been able to trace it to a neighbor who had carelessly left sugar or something else out which attracted the bees, and they got so thick that in order to get rid of them he put out fly-poison to kill them. I have told them to take it in or I would prosecute them, and they did it. In one case I got rid of it by changing the queen, and the queen I took away from them built up one of the finest colonies.

Mr. Richardson—I think they get it by working on some poisonous plant. I have seen them working on a potato plant which I had sprinkled with a mixture of Paris-green and flour. We know that they do gather poisonous honey, and might not bee-paralysis be on account of their gathering poisonous honey?

Mr. Root—This disease appeared in my apiary, and the bees were thin and looked like walking skeletons. Now in regard to this poisoning. I consulted a lawyer, and he said it was a crime to poison anything at all; that there was a heavy penalty for poisoning anything.

E. L. Carrington—I have had considerable experience with this "nameless disease," and I will tell you how it works with me. The first colony that I had that had this disease, it came on in the spring. The bees kept getting fewer in numbers. At last they died so rapidly that I became alarmed and salted them with salt brine—put it all over the comb. That checked it for awhile. I always hive on the same stand, and I took the combs out and put in new frames. That stopped it for that season, but the next season it was worse than ever. They had the same queen. I took out that queen and gave them another. This I did when the hive was in that condition, and I have had no more of the trouble ince her bees came out. So far as poison is concerned, I know that could not have

been, for I did not have the trouble in my other colonies, and I had 70. I have used sulphur, but I believe sulphur hurts the queen. I do not think she is good afterwards. If I find that the bees have this disease, I always kill the queen, or double them up and give them a new queen, for I am satisfied that it is the queen that causes the trouble.

Feeding Bees in the Cellar.

Question No. 3.—"Where bees have been neglected, is it practical to feed up in the cellar?"

Pres. Abbott—Yes. I want to tell you how I fix bees so that they will winter all right. I take some granulated sugar and melt it carefully, and make a cake about half an inch to an inch thick, 6 inches wide and 9 inches long. I then go down into the cellar, turn the cloths back, find out just where the cluster is, and lay this cake right on top of the cluster, and then let them alone, and from the first of January they will be all right until the following March. A cake like that will hold about 5 pounds, and it will keep them all right. I have never lost a single colony that had a cake of granulated sugar in it. They don't need any honey. I have done this for years, but have never seen it in the bee-papers, and I have never sent it to them.

Mrs. Strawbridge—I find that if they have been fed in this way during the winter, the bees will abscond when put out in the spring. They will take the absconding fever.

Pres. Abbott—I have been experimenting with this a great deal. As soon as the warm weather sets in I find that the bees will chip off little flakes of it, and will fly out with it, but they do not abscond. As soon as this commences I melt the sugar and feed it to them, and they will take it all down. I always put the cake in if they have from 5 to 100 pounds of honey. Five pounds of this cake will winter a colony. Use as little water as you can. Bees can only go one way in winter, and that is upward in the line of heat. They keep the heat in the cluster, and as they move up they come in contact with the cake of sugar, and the heat keeps the sugar moist. You might have 100 pounds of honey in the hive, and if it is not above the cluster the bees will die. I lay the cake on sticks to give a bee-space.

Spring Dwindling of Bees.

Question No. 4.—"Spring dwindling: its remedies and prevention."

Mr. Root—The cake of sugar is all right.

Mr. Holtermann—Winter your bees right. Your climate is different from ours in Canada, but I think the general conditions are the same. I think it is on account of improper wintering. Poor wintering reduces the vitality of the bees to such a low state that before they can rear young bees they die off. I carry the bees into the cellar and tier the hives up one on top of the other, with a cushion over them. The last year or two I have adopted the plan of raising the back of the hive ⅜ of an inch, and I find that a very satisfactory way.

Mr. Whitcomb—I think it is on account of a lack of water early in the spring that causes the bees to fly out. I mean the lack of water near the hives. The bees come out on warm days and fly about for water, and if there is none near the hives, they will fly farther. They drink the cold water, and it seems to paralyze them so they cannot get back to the hive, but die. I have adopted a system of watering my bees, and I have no trouble now with spring dwindling. I take a block of wood 5 or 6 inches square, and cut grooves from one corner to the other almost to the edge. They will cross in the center of the block. I then take a common quart jar, a fruit jar, and fill it full of water and invert it on the block. These little grooves will fill up, and it will be replenished as the bees take it up. I set this right near the hives, and the bees can then get all the water they want without flying long distances for it and getting chilled. I have found this to be a sure preventive for spring dwindling.

The Bee-Smoker.

Question No. 5.—"What is the most practical bee-smoker?"

Pres. Abbott—The one you like the best, and your dealer sells the cheapest.

Foul Brood.

Question No. 6.—"What can the Association do to stop the spread or prevent the spread of foul brood?"

Dr. Miller—We cannot do anything.

Freight Rates on Bees, Honey and Supplies.

Question No. 7.—"Are we as bee-keepers receiving fair rates of freight on bees, honey and supplies? If not, may we not as an Association bring some influence to bear upon the Classification Committee to secure fair rating?"

The President appointed a committee

of three—Dr. C. C. Miller, C. P. Dadant and E. Whitcomb—to take up this matter and see what could be done towards securing fair freight rates on the commodities mentioned in the question, and to report as soon as possible.

The convention then adjourned until 1:30 p.m.

(To be continued.)

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Introducing Queens.

When no honey is coming in, and when robbers are likely to be around, this is the way I introduce a queen: I tried to change some queens from some hives last summer by taking out the old queen and leaving the colony queenless for 4 or 5 days, and then introducing a young queen, but I lost several queens with different colonies in that way, as there was no honey coming in; so I fed them a little for a few days in the evening. Then I found that I could introduce the queens with success.

Lucan, Ont., Nov. 30. H. GIBSON.

Bee-Keeping 'Way Up North.

I think you may consider me the most venturesome bee-keeper, as I am located about half way between the 46th and 47th degrees of latitude. I have only just begun to keep bees. I bought one colony July 1—a very fine colony—and I made three more in the course of the summer. They all did finely, but I fed them up in October, so they are all in good condition. They are packed in the cellar under the kitchen. I did not put them in till Nov. 13, and I think I can reasonably hope they will be all right in the spring.

We have willow blossoms just loaded with pollen before the snow is all gone in the spring, and have lots of cherry and plum blossoms, and hundreds of acres of wild raspberries, besides other wild fruit and berries; also lots of basswood, some clover, and they raise some buckwheat in the neighborhood. Then for fall we have acres of fireweed and touch-me-not, besides asters in a dozen varieties, and as many golden-rods. This country is very thinly settled—our township is not organized, for want of settlers, so there is any amount of room for wild flowers to grow.

If there is any bee-keeper as far north, or farther, I should like to know who it is, and should like to correspond with him or her, or any other practical bee-keeper, as I am only a beginner and have much to learn. My highest ambition is to keep 100 colonies of bees, and make it pay. I have 4 to begin with, and between this and spring I hope to learn enough to care for them properly, and in time become a successful bee-keeper—even up here in the cold.

The American Bee Journal I receive every week, and read with great pleasure and profit. I shall continue to do so as long as I keep bees.

MRS. MATE WILLIAMS.

Nimrod, Minn., Nov. 26.

One of the Poor Years.

This has been one of the poor years that we have once in a while. From 17 colonies last spring I took 450 pounds of extracted honey, besides saving 16 frames of honey for spring feeding. The increase was small—only two colonies swarmed, and they only cast one swarm each. I put my bees into the cellar Nov. 9, with the ground covered with snow. A. E. BRADFORD.

Hammond, Wis., Nov. 26.

Feeding Sugar for Winter Stores.

I like to read that piece of C. Davenport's, on page 658. It's particularly interesting, coming from a man that is all bees. But he's a little behind the times in feeding. Nearly 20 years ago A. I. Root told the same way—stirred the sugar and water with a hoe. He said it didn't do any good to boil the sugar. How can it? It's all been thoroughly boiled in making the sugar. And it's possible that Mr. Davenport may not be just right when he says syrup made by the cold-water process will not crystallize, while that made by boiling will. It has all been boiled, and I reckon when you make a syrup of the same strength it is pretty much the same,

whether you dissolve it in cold or boiling water.

But it saves work to dissolve it cold. And if Mr. Davenport will try it, I am sure he'll find he can save work over his plan by using the percolating feeder. If he has never tried it, he doesn't know how much easier it is to just pour in the dry sugar and then the water. No daubing with syrup.

I like his way of using feeders better than using crocks, if a body has the feeders. My bees take the feed just as quick with the percolating feeders as if I fed syrup.

I wish Mr. Davenport would turn some of his feeders into percolators, and then tell us which he likes best. You see he can't tell which he likes best till he tries both. A. BEEMAN.

Ogrenma, Ohio.

Bees Did Very Well.

My bees have done very well this year, as my honey will bring me $200. I had 63 colonies. In all I had but 13 swarms, and one left for the woods, or some other place. THOMAS ASH.

East Toledo, Ohio, Dec. 4.

Results of the Season, Etc.

We have now 22 colonies of bees, having taken about 300 pounds of honey from 17 colonies, and increased to 22. They all have stores for the winter.

We have had a disease among our bees, which we thought was foul brood, so my husband killed the first colony, thinking it was so. But after awhile we saw they all became cured of it themselves. We also had seen a similar case mentioned in the American Bee Journal, so we knew it was all right.

MRS. J. KNUPPEL.

S. Brooklyn, N. Y., Nov. 26.

Early Spring Shipping of Bees.

This has been the poorest season for honey since bees have been brought to this country—16 or 18 years ago. I got only about 6,000 pounds of comb honey from 200 colonies, being ⅛ of an average crop, but we never have had any total failures here, nor any bee-diseases of any kind, no winter losses or spring dwindling, nor do we ever have to feed bees at any time in the year, and no preparation for winter is required. Our first honey comes from fruit-bloom, about the last week of February, and there is always something for the bees up to the first of November.

By the way, why would not this be a good county for our friends up North, that want to buy bees in the spring, to get their bees from here as early as they want them? Shipments from here would have to be made about the first of April, and not later than the 15th, as then our swarming season commences, and by May 1 the hives are nearly a solid mass of brood, and boiling over with bees. May is generally the best honey month in the year here. Eight-frame dovetail hives, with a slat bottom super, are used almost exclusively in this part of the "Great American Desert."

J. G. STEWART.

Las Cruces, N. Mex., Nov. 20.

The Season of 1894.

May 20 found me with 25 colonies, strong in brood and bees, being the same number I put into winter quarters the fall before—minus one, which, somehow, became queenless. From May 20 to June 10 the weather was so cold and wet that the bees were confined to their hives the most of the time, hence the latter date found them reduced in brood and honey. This made swarming late.

Our crop of white or spring-stored honey was very light. Between basswood and the fall flowers the bees, as is usual in this location, had a vacation. The fall flowers, especially golden-rod, yielded fairly well. There was no great flow, but a continuous one for weeks. The weather was fair and dry, so that every day counted. The honey gathered was very thick and rich. Almost every colony had sufficient stores for winter—some had a surplus. J. P. SMITH.

Sunapee, N. H., Nov. 30.

Past Season's Report.

I commenced last spring with 8 colonies, and got 650 pounds of honey, after I had cleaned it all up and picked out all the partly-filled sections; and I did not know anything about a bee two years ago, when I subscribed for the American Bee Journal. We have had a very poor season here for honey, for everything was burned up in the summer, and just as the fall flowers were commencing to bloom we had the worst hail-storm within the memory of the oldest inhabitant. It swept everything before it for about 4 or 5 miles wide.

I put my bees into the cellar Nov. 16. I am afraid that I was a little too fast,

for the temperature got up to 52° today, and it was calm. I built a cellar under the house this summer, which is as near perfection as it can be under a house. But I have come to the conclusion that Mr. Doolittle's plan of a bee-cellar is the right one. I read his ideas of underground wintering of bees on page 622 of the American Bee Journal, which I think are about right.

DANIEL SMETHURST.

Seneca, Wis., Nov. 27.

N. E. Ohio and N. W. Pa. Convention.

The convention of the Northeastern Ohio and Northwestern Pennsylvania Bee-Keepers' Association held at Corry, Pa., on Nov. 21 and 22, was poorly attended, there being no one present from Ohio. The sessions were of much interest and profit from first to last. On account of the non-attendance of the Ohio members, the convention adjourned *sine die*. The organization did not break up—it voted to retain the old officers.

The Northwestern Pennsylvania Association was organized to meet next year, at the same date as this. It is officered as follows: President, D. A. Dewey, of Columbus, Pa.; Vice Pres., C. D. Freeman; Secretary and Treasurer, Geo. Spitler, of Mosiertown, Pa.

GEO. SPITLER, *Sec.*

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & CO., 128 Franklin St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 423 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Read our great offer on page 739.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Oolo.

ONTARIO, CANADA.—The annual meeting of the Ontario Bee-Keepers' Association will be held at Stratford, Jan. 22, 23 and 24, 1895. All bee-keepers are cordially invited to attend. W. COUSE, Sec.
Streetsville, Ont.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. PIZER, Sec.
Franklin, Pa.

ILLINOIS.—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend. B. KENNEDY, Sec.
New Milford, Ill.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

MICHIGAN.—The Michigan State Bee-Keepers' Association will hold its annual meeting Wednesday and Thursday, Jan. 2 and 3, 1895, in the city of Detroit, at the Perkins Hotel, cor. of Cass and Grand River Avenues. Rates, $1.25 and $1.50 per day. The former rate if two occupy one room. This will be at a time when railroad rates will probably be one-half fare. W. Z. HUTCHINSON, Sec.
Flint, Mich.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1⅓ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.
Indianapolis, Ind.

IOWA.—The Eastern Iowa Bee-Keepers' Association will hold their annual meeting at Anamosa, in the court room, on Dec. 26 and 27. There will be reduced rates on all railroads at this time. This will give all a good chance to attend the bee-meeting, and an opportunity to look through the State prison, which is located at Anamosa. Let all the bee-keepers within reach take advantage of this grand opportunity. Come with the intention of having a grand, good time. Let each bring with them some fixture or fixtures that he or she thinks of value in the apiary, and some important question for discussion.
Welton, Iowa. FRANK COVERDALE, Sec

Honey & Beeswax Market Quotations.

CHICAGO, ILL., Dec. 7.—The trade is taking some comb honey for holiday display. This helps out all the choice lots, which bring 15c. per pound; other grades that are good to choice, 13@14c. The dark grades as usual are slow of sale at 9@10c. Extracted sells chiefly at 6@6½@7c. Very little basswood or clover is offered in 60-lb. tins, two in a case. Such meet with ready sale at top prices.
Beeswax scarce at 28c. R. A. B. & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 1@3c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are not quite as salable; and 2-pound sections are little called for. We quote as follows: 1-pound fancy clover. 13@14c.; 2-pound, 12½@13c.; 1-pound white, 12@12½c.; 2-pound, 12c.; 1-pound fair, 10@11c.; 2-pound, 10@11c.; 1-pound buckwheat, 10@11c.; 2-pound, 9@10c. Extracted, clover and basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 50@60c. per gallon. Beeswax, scarce and in good demand at 29@30c. C. I. & B.

CINCINNATI, O., Nov. 19.—Demand is good for choice white comb honey at 14@16c. Extracted is in fair demand at 4@7c., with a fair supply.
Beeswax is in good demand at 22@27c. for good to choice yellow. Supply scant.
C. F. M. & S.

KANSAS CITY, Mo., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat. 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6½c.; buck wheat, 5½@6c. Beeswax, 27@29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

KANSAS CITY, Mo., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Nov. 24.—The receipts of comb honey have been very large and exceed those of former years by far. The demand has not been very active of late and there are no signs of improvement. The supply is accumulating and the prices show a downward tendency. We quote: Fancy white, 1-lbs., 13@14c.; fair white, 11@12c.; buckwheat, 10c. Two-pound sections are in very light demand and sell at from 1@2c. a pound less. The market on extracted is quiet, with plenty of supply of all kinds. We quote: White clover and basswood, 6c.; Southern, 50@55c. per gal. Beeswax is firm and in good demand at 30@31c. H. B. & S.

CHICAGO, ILL., Nov. 27.—Up to the present the sales on honey have met with our expectations. We have received considerably more honey than we figured on handling, owing to the short crop report, and we think the early shippers reaped the benefit. However, we are now getting the average price, viz.: Fancy, 15c.; white, No. 1, 14@13c. Extracted, 6@7c.
Beeswax, 28@29c. J. A. L.

Profitable Bee-Keeping, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, possibly each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

RUDY'S PILE SUPPOSITORY

Is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and free Sample to MARTIN RUDY, Registered Pharmacist, Lancaster, Pa. NO POSTALS ANSWERED. For sale by all first-class druggists everywhere. Peter Van Schaack & Sons, Robt. Stevenson & Co., Morrison, Plummer & Co., and Lord, Owen & Co., Wholesale Agents, Chicago, Ills.
Pease mention the Bee Journal. Nov15

Wants or Exchanges.

This department is only for your "Wants" or bona-fide "Exchanges," and such will be inserted here **at 10 cents a line** for each time, when specially ordered into this department. Exchanges for cash or for price-lists, or notices offering articles for sale, will not be inserted here—such belong in the regular advertising columns, at regular rates.

WANTED—Single man, with good experience, to take charge of the La. Bee-Keepers' Supply Manufactory. Must also understand the care of bees. Having met with a sudden accident, I am compelled to have an experienced man to take charge of my business at once.
LOUIS V. ESNEAULT,
Box 54, Donaldsonville, La.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Sample Copy Free.

VOL. XXXIV. CHICAGO, ILL., DEC. 20, 1894. NO. 25.

A Merry Christmas we would wish
Our friends both old and new.
"A Merry Christmas!" Pass it on—
With joyful hearts and true.

"Fools can find fault, but it is a *wise* man who finds the merit in a thing." This quotation is commended to those of us who always are looking for flaws, instead of trying to find some good in our fellows.

Editor Stilson, of the Nebraska Bee-Keeper, says that Pres. Abbott, at the St. Joseph meeting, "showed himself to be a splendid executive officer, and set an example worthy of every future President of the North American to follow." Right you are, Bro. Stilson.

A Convention Number is what you might call this issue of the American Bee Journal. It will pay you to read it all carefully. The essays of Pres. Abbott, R. McKnight, of Canada, and of Chas. Dadant and S. E. Miller, of the United States, are well worth your closest attention. You can't afford to miss reading them or the discussions.

Our Contributors will please be patient, for we expect to publish their communications as soon as possible. We thought it best, however, to dispose of the North American convention report first—or let that have first place—and let other matter wait. We have published the convention report just as fast as we could get the copy from Secretary Benton—in fact, faster, as we received, direct from the writers, the article from Pres. Abbott on "The Wintering of Bees," and the 10th Annual Report of the "National Bee-Keepers' Union," by the General Manager, Thomas G. Newman. Both will be found in this number.

A Good Reviewer is Mr. Hasty. In his last contribution to the Review his sharp, pointed pencil just punctures things so that enough "wind" is allowed to escape to permit a more normal condition in a certain "quarter." "Quarterly" applications of the doses which "Dr." Hasty so wisely administered ought to help to "improve bee-literature" (so-called). in the locality most needed. Go on, Bro. Hasty, in your good work; and whenever "this locality" needs special attention, "spare not."

Mr. A. M. Preston, of Longmont, Colo., called on us last week. He was in Chicago with a carload of alfalfa honey from his locality. Mr. P. is the bee-inspector for Weld county, Colorado, and is a very pleasant gentleman. He had about 5,000 pounds of comb honey this year. Mr. R. C. Aikin and brother, of Loveland, had 20,000 pounds. Colorado is right up with her honey crops—and her alfalfa honey is most excellent.

Bees and Horticulture.—The annual meeting of Northern Illinois Horticultural Society was held at Marengo, Ill., Dec. 5 and 6. Dr. C. C. Miller is given the credit of being its projector, having made the first plea for it, and being elected its first Secretary, 27 years ago. He was elected President of the society at its recent meeting—a thing to which he would in no wise have consented, but that he thought it possible thereby to unite more closely bee-keepers and fruit-growers. We hope bee-keepers everywhere will take a deeper interest in horticultural matters, and thereby help to show horticulturists that bees are their friends instead of supposed enemies. Bee-keepers and horticulturists should pull together, and not be blind to the fact that in a "union" of these two natural forces "there is strength."

The North American.—Bro. Hutchinson, in the last number of the Review, comments on the suggestions that have been made in the American Bee Journal, about the North American holding two or four meetings a year. To sum up what he says, we quote his closing sentence: "When the North American attempts to hold more than one meeting annually, it is doomed." May be so. But we'd like to see *two* meetings a year tried first. And yet we don't want to see it "doomed." Before the next annual meeting in Toronto there will be ample time to look on all sides of the matter, through the bee-papers. We think the Review and the American Bee Journal are the only papers so far that have expressed an opionion on the subject. We wonder how the other editors stand on the question.

Insect Enemies of Bees.—Prof. A. J. Cook, of Claremont, Calif., is trying to keep track of all the insect enemies of bees, and desires that all such, whenever found, be sent direct to him. He will then report on them through the American Bee Journal. Be sure to write Prof. Cook, at least a postal card, telling him when you send him anything, and also put your name on the package when mailing it, to prevent mistakes being made.

Prof. Cook, besides being a bee-keeper, is an expert entomologist and biologist, and will be able to help bee-keepers to distinguish any or all insect or other bee-enemies.

A Prompt Renewal of all subscriptions that expire this month is earnestly desired at this office. We wish to take this opportunity to thank all the friends of the old American Bee Journal for the interest they have manifested in its welfare, by sending in new subscriptions, and by contributing whatever bee-information they have been able to furnish. We believe in giving everybody a chance to be heard, especially when they write something of interest or special value, be it ever so little. We never expect to be open to the charge of having "pet contributors," unless *all* who feel like writing for our columns are considered "pet contributors." The American Bee Journal is here to help every bee-keeper in every possible way.

Large Handlers of Honey.—Editor Holtermann, of the Canadian Bee Journal, visited the big honey-firm of Chas. F. Muth & Son, at Cincinnati. Mr. Muth has done business at the same place for 33 years. They handle honey in enormous quantities—the freight on a single shipment having been as high as $500. One shipment consisted of 187 barrels of honey. Another, a carload of comb honey, over one-half sold in three days. They make regular shipments of honey to Germany. If every city had such pushing, energetic and honest honey-dealers as Chas. F. Muth & Son, there would be no trouble in finding a good market for every pound of surplus honey bee-keepers could produce.

Mr. Alfred Mottaz, of Utica, Ill., gave us a short call last week. He has 90 colonies of bees, and had about 2,500 pounds of extracted honey this year—mostly from heart's-ease and sweet clover.

"Improving Bee-Literature" is a phrase that some folks are nowadays rolling, as a sweet morsel, on their egotistic tongues. If what we have seen so far from their pens is a fair sample of what they consider "improved bee-literature," the best we can say of it is, "the cure is worse than the disease"—yes, infinitely worse. But, then, there are people who have to "blow off" about so much or "bust." They have our full consent to do either or both. When they are through, probably they will find the world still revolving upon

its axis, instead of around them, and bee-literature still equal to all the requirements. Bee-literature cannot improve any faster than the people improve in all that tends to a higher and nobler civilization. Bee-literature is a human creation—hence, of course, imperfect — but, like everything good, "*going on* to perfection."

Mr. W. Z. Hutchinson, of Flint, Mich., as most of our readers know, was elected Secretary of the North American

Secretary W. Z. Hutchinson.

Bee-Keepers' Association at the St. Joseph meeting. We take pleasure in presenting him by his picture to our new readers this week—most of the older readers have long been familiar with his face, having met him at conventions, or have seen his picture in these columns before now.

We heard one of the oldest members of the North American say of him at St. Joseph: "Mr. Hutchinson is the *best* Secretary the North American ever had." Next year he will have another opportunity to prove the statement quoted, as he has several times been elected Secretary of the North American.

Most Valuable for Advertising.—Unsolicited testimonials to the value of any article are always the most appreciated, and should carry with them a force that is convincing. Such is the following, which we received recently from Chas. Dadant & Son—the world-renowned makers of comb foundation:

FRIEND YORK:—Although the number of answers to advertisements is more limited than ever this year, we find that the American Bee Journal is right up—none ahead—in the number of new names furnished. As the editor of the American Bee Journal is not interested in the sale of implements, that fact makes the American Bee Journal, in our eyes, the most valuable advertising medium to-day for us Westerners, at least.

CHAS. DADANT & SON.

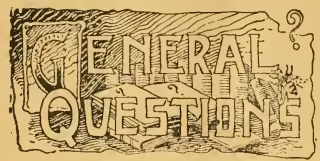
Hamilton, Ills., Dec. 5, 1894.

The above firm keep a standing advertisement in all the leading bee-papers, and so they are competent to speak on the subject. As we have said before, *continuous advertising pays.* Try it, if you wish to succeed.

Miss Rosa C. Roese, a beloved daughter of Rev. Stephen Roese, of Maiden Rock, Wis., died at her home Dec. 2, aged 27 years. Her bereaved father has written us a touching letter, and our sincerest sympathy goes out to the sorrowing family. Rosa was for some years an efficient school-teacher, and latterly was preparing for medical missionary work, at the Sanitarium in Battle Creek, Mich. In some way she contracted that fatal disease—consumption—of which she finally died. The Maiden Rock Weekly Press, of Dec. 5, contains a column obituary notice, giving in tender detail a condensed account and faithful tribute to the beautiful character and devoted Christian life of the deceased. Surely, our bereaved brother and his saddened family have the sympathy of the bee-keeping friends everywhere, in their deep sorrow.

☞ "I have taken the American Bee Journal for a number of years, and I like it as well as any bee-paper I have, and I take almost all I know of."—F. A. Houghton, of Massachusetts, Dec. 4, 1894.

A B C of Bee-Culture—just see the magnificent offers on page 771. Every one of our subscribers can now have a copy of that splendid book.



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Red Clover Honey Foaming.

I have six gallons of second-growth red clover honey, and every time I get any out it all foams up like sea-foam. It is not sour. What is the matter with it? J. V.

ANSWER.—There is more or less pollen in the honey, I suppose, and that ferments, although the honey keeps it sweet, so you don't recognize much sour taste in it.

Setting Out Basswood Sprouts.

Will it do to set out basswood sprouts this fall? I have 200 fine sprouts.
Lebanon, Ind., Dec. 1. E.

ANSWER.—Yes, you can set out basswood sprouts any time when they have no leaves on. Perhaps spring is the best time, but not always the most convenient. If you set out now, mulch with coarse manure or something of the kind to prevent frequent freezing and thawing of the roots.

Mice Disturbing the Bees.

Mice are infesting my apiary badly. They go into the hives, gnaw pieces out of the frames, and at last are beginning to make nests in the corners of some of the hives. What is the surest and best method of ridding the apiary of them, molesting the bees as little as possible? I have traps on small platforms at the entrances of some of the hives, but that does not appear to do away with them fast enough. Will poison work without injury to the bees? If so, what kind, and in what manner should it be used?
Harrisonville, Ill., Dec. 3. W. R. T.

ANSWER.—You do not say so, but I suppose your bees are out-doors. That makes it a little harder to take out the mice than if the bees are in the cellar. You can put poison under the stands where domestic animals and poultry cannot reach it. One way is to mix arsenic and sugar, and put in different places as much as will lay on a dime. Perhaps better still, cut a thin slice of cheese, ¼ inch thick, spread strychnine lightly over it, and cut in half-inch squares.

But I like still better the plan of fastening them out of the hive. I use wire-cloth with three meshes to the inch. That effectually prevents the passage of mice, but allows free passage for the bees. There is little danger of mice getting into a hive while bees are flying, but when it gets so cold that bees do not stir from the cluster, then the mice take possession and are not disturbed by the bees till it becomes warm again. So I get the wire-cloth on before it gets very cold.

In your case I suppose the mice have already taken possession, but in spite of that I would close up with wire-cloth. It will at least prevent more going in, and when the first warm day comes the bees will kill the enclosed mice.

Bees Leaving in Cold Weather.

My bees are on the summer stands. Why do apparently healthy bees fly out and sail away when the temperature is freezing and below? H.
McLean, Ohio, Dec. 5.

ANSWER.—I don't know. Bees die of old age throughout the winter, and it may be such fly off when they have a chance. Possibly the bees that fly off may be diseased in some way. Bees about to die, instinctively leave the hive.

☞ See A B C offer on page 771.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

PROFITABLE BEE-KEEPING.

Lesson No. 15.

A NEW AND EASY WAY TO MAKE BEES-WAX.

I have just discovered a new and easy way to make beeswax, and just as fine wax as can be made by the solar plan—no difference how old and tough the combs are.

Take a half-barrel and arrange a cloth so that it will swing down about half way of the barrel. Any strong porous cloth will do, or wire-cloth is good. Then boil the old combs in a copper or tin vessel till all is thoroughly heated, putting the combs right into the water, just as if you were going to cook it. Have some clean, boiling water in another vessel—enough to fill the half-barrel one-third full. Pour the boiling water into the half-barrel first, then pour the melted combs, water and all, into the strainer. Cover up the barrel with two thicknesses of gunny-sacking, let it alone for a day or two, then go around when you are ready for the wax, loosen the hoops so as to let out the water and you will feel astonished to see how nearly all the wax is drained out.

The larger the amount of combs you have, the larger barrel you will need. The hot water in the barrel keeps the whole contents hot for 12 hours, gives all the dirt and dregs time to settle to the bottom, the wax cools so slowly that it does not crack, the staves of the barrel spread out and leaves the wax. All in all, it is the easiest way to make beeswax, aside from the solar plan, that I know of, and can be done at any time of the year, and no combs too old nor too tough to work, as with the solar plan. And then we have our wax thoroughly cleansed at one operation.

If you will only give this plan a trial, you will find that you can do away with a whole lot of muss and bother, and the whole operation of making 25 to 50 pounds of wax need not take more than one hour of your time.

JENNIE ATCHLEY.

Cell-Cups Made in Winter.

MRS. ATCHLEY:—Will manufactured queen-cell cups, made during the winter for next season's use, be as good and acceptable to the bees as those freshly made? It would be a gain, if they, like many other things, could be made in the winter time. WM. MUTH-RASMUSSEN.

Independence, Calif., Nov. 23.

Friend M.-R., I have given your question some thought before replying, and while I have not tried cell-cups kept during the winter, I am satisfied they will be just as good as fresh ones, if kept clean, dry, and from being mashed. I have kept them for two months or more, and could see no difference. It has been stated that bees do not like to work foundation that has been made a season, but I have as yet failed to see any difference when the foundation was properly kept—clean, dry and free from moth. JENNIE ATCHLEY.

Good Rains—Assured Success.

They are having good rains in Humboldt county, Calif., so says F. H. Boynton. They look forward to a good honey year the following summer, when they get plenty of rain during winter in California.

Some are asking if I think they would be assured of success should they move their bees here. To this I will say no. I do not know that you would be *assured* of success—I can only tell you that it is a good bee-county, and some will succeed while others will not. This has always been the case and always will be, I suppose. You know John outran Peter and beat him to the tomb where Jesus was buried, and some may outrun you in the bee-business, and succeed while you may fail.

JENNIE ATCHLEY.

Bees Reasoning.

I see Mr. Allen Pringle, on page 660, thinks that bees reason, as well as many other insects and animals. While Mr. Pringle's ideas may be right, I am of the

opinion that bees do not reason at all. Why? For the fact about reason shows that it won't always lie still. The bees are the same to-day that they were always. A colony of bees, put into a hive to-day, remains the same throughout their lives. Their combs are the same, their work through and through is identically the same, and if we stop to use our reason for a moment we can see that reason *will not* stay exactly in the same channel always.

If the bees had reason they would, it seems to me, change their modes of labor, and then they would soon be like the people of to-day—so mixed up with their ideas and general principles, etc., and possibly might boycott humanity, and we would get no honey.

Suppose Dr. Miller should say this year that his bees boycotted him, and would not gather any honey for him. Well, if he should say so in earnest, somebody would laugh at him. Man is known and recognized above other animals and insects by his reasoning powers, and by this power has control over all the beasts and insects. Otherwise it might be the other way.

JENNIE ATCHLEY.

Queens and Queen-Rearing.—If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may *safely introduce* any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearning"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

Bound in cloth, postpaid, $1.00; or clubbed with the BEE JOURNAL for one year—both for only $1.65; or given free as a premium for sending us three new subscribers to the BEE JOURNAL for a year at $1.00 each.

Bound in paper cover, postpaid, 65 cents; or given free as a premium for sending us two new subscribers; or clubbed with the BEE JOURNAL a year—both for only $1.40. Send all orders to the BEE JOURNAL office.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. Prices, postpaid: Single copies, 5 cents; 10 copies, 35 cents; or 100 for $2.00

CONVENTION DIRECTORY.

Time and place of meeting.

1894.

Dec. 26, 27.—Eastern Iowa, at Anamosa, Iowa
Frank Coverdale, Sec., Welton, Iowa.

Dec. 27, 28.—Texas State, at Beeville, Tex.
Mrs. Jennie Atchley, Beeville, Tex.

1895.

Jan. 2, 3.—Michigan State, at Detroit, Mich.
W. Z. Hutchinson, Sec., Flint, Mich.

Jan. 9.—Indiana State, at Indianapolis, Ind.
Walter S. Pouder, Pres., Indianapolis, Ind.

Jan. 21, 22 —Colorada State, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.

Jan. 22-24.—Ontario, at Stratford, Ont.
W. Couse, Sec., Streetville, Ont.

Jan. 25, 26.—Ontario Co., at Canandaigua.
Ruth E. Taylor, Sec., Bellona, N. Y.

Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.

Jan. 30, 31.—Vermont, at Middlebury, Vt.
H. W. Scott, Sec., Barre, Vt.

Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.

———.—.—North American, at Toronto, Can.
Frank Benton, Sec., U. S. Dept. Agriculture, Washington, D. C.

☞ **In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.**

North American Bee-Keepers' Association

OFFICERS FOR 1895.

PRES.—R. F. Holtermann.....Brantford, Ont.
VICE-PRES.—L. D. Stilson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson...Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting bookiet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for $1.15.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 800 for advertising offer.

PROCEEDINGS

OF THE

Twenty-Fifth Annual Meeting

OF THE

NORTH AMERICAN

BEE-KEEPERS' ASSOCIATION.

BY FRANK BENTON, SEC.

(Continued from page 761.)

SECOND DAY—AFTERNOON SESSION.

Upon re-assembling the Association proceeded to the selection of the place of meeting and the election of officers for 1895.

The Next Place of Meeting.

For the place of meeting, Toronto, Can., was proposed by R. F. Holtermann, of Brantford, Ont., and also by A. E. Sherrington, of Walkerton, Ont., in a letter read by the Secretary. Lincoln, Nebr., was urged by L. D. Stilson, of York, Nebr., who supported his request by very cordial invitations from the Governor of the State, from the Chancellor of the State University at Lincoln, from the Mayor of the city of Lincoln, from the Lincoln Commercial Club, and from the Nebraska State Bee-Keepers' Association. Vice-President O. L. Hershiser, of Buffalo, N. Y., in a letter which was read and heartily seconded by the Secretary, presented the advantages of Buffalo. Mr. J. Fletcher, of Ottawa, Can., in a letter addressed to the convention, suggested that city. Los Angeles, Calif., was also brought forward in the same manner. After considerable discussion, Mr. Stilson withdrew his motion and announced the vote of Nebraska for Toronto, after Mr. Holtermann had promised, in behalf of Canada, that the influence of the Dominion bee-keepers would be used to bring the meeting to Lincoln in 1896. The vote was then taken, and Toronto was declared the choice of the convention.

Election of Officers for 1895.

Several nominations for each of the offices were made, and, the rules having been suspended to permit *viva voce* voting, the following were declared duly elected:

President—R. F. Holtermann, Brantford, Ont.

Vice-President—L. D. Stilson, York, Nebr.

Secretary—W. Z. Hutchinson, Flint, Mich.

Treasurer—J. T. Calvert, Medina, O.

Following the election of officers was an essay by Mr. R. McKnight, of Owen Sound, Ont., which was read by Mr. Holtermann. It was entitled,

Bee-Keeping in Canada.

Nearly 40 years ago, and while this Province (Ontario) was yet but thinly settled, I knew an expert bee-hunter to bring home tubfuls of honey from the pine forest. Where the bees that collected it originally came from I know not, as none were kept within many miles of the place.

The condition under which the bees lived, however, were favorable. A hollow pine tree, with its warm padding of dry, decayed wood, was a congenial home for them. In no modern hive do we find conditions so favorable to the well-being of a colony, as these hollow giants of the forest furnished. Surrounded by a shell a hand's breadth in thickness, lined with the best kind of absorbent, a solid trunk above, ample space below, with a "punk-hole" for an entrance, they gave comfort, accommodation and protection, surpassing that of any modern contrivance of the hive-maker.

It was to those old-time bee-trees that our earlier bee-keepers were indebted for their stocked "gums"—the progeny of which, modified and improved by the admixture of new blood, constitute the present working-force of our bee-keepers.

The box-hive succeeded the bee-gum, and was for years the best known method of housing bees.

When the movable frame first came into use in Canada, I am unable to say; nor do I know who introduced it. Both it and the extractor were known of, and their advantages understood, some years before either came into general use. D. A. Jones was among the first to extensively employ them, and was unquestionably the first to demonstrate the honey-producing capabilities of this Province. In 1879 he placed on exhibition, at the Toronto Industrial Fair, 10 tons of honey—the product of his own apiary that season.

Honey was not on the Industrial prize-list that year, but its managers gave Mr. Jones a massive gold medal for his exhibit. Mr. Jones' exhibit attracted so much attention that the Toronto Globe sent a special reporter to Beeton to

write up his apiary, as well as his methods of managing it. The fame of Mr. Jones' immense exhibit at the Toronto show, and the Globe's report of his management, led up to a bee-keepers' convention during Fair time the next year.

I have attended a good many bee-keepers' meetings from then until now, but in point of numbers and manifest interest in all that was said and done, that convention was the greatest of them all. It met in the City Hall, Toronto, and that commodious room was packed from the dias to the door during the three days the convention was in session. The writer had the honor of presiding at that convention, but, as might be expected, Mr. Jones was the chief speaker. Indeed, those present came to sit at the feet of D. A., and drink in apiarian knowledge from the lips of the Gamaliel of Beeton, who knew so well how to paint the beauties of bee-keeping in pleasing and attractive colors. That convention gave an impetus to bee-keeping all over the Province. At its close the Ontario Bee-Keepers' Association was organized.

Fourteen years have come and gone since then, and it is not too much to say, that in the interval Canadian bee-keepers have made a place for themselves in the apicultural world, of which they have no reason to be ashamed.

I shall now briefly advert to the agencies employed in bringing about this result, some of which are the creation of our own people, and serves to exemplify their character. In intelligent application of detail, combined with a thorough knowledge of the principles involved in their work, they have no superior. To these characteristics may be attributed the high level they occupy in the apicultural world. Amongst them may be found as large a proportion of men, skilled in all that pertains to their calling, as any country can produce. This manifests itself in the output of their apiaries. But they have enterprise as well as intelligence. The substantial aid they have secured for the industry proves this. Organized effort is what has brought them this aid. In other words, the Ontario Bee-Keepers' Association is the agency through which it has been obtained.

I know I leave myself open to the charge of "boasting" (in some quarters) when I say, that in my judgment our Association is the best and solidest organization of its kind on this continent. It has features peculiar to itself. Through its instrumentality there has been secured for those engaged in the honey-industry, a greater share of public recognition, and more substantial aid than any other like association with which I am acquainted has succeeded in securing. If this be true, the charge of boasting has no foundation.

During the first five years of the Association's existence it had no material outside assistance, but was steadily working with that end in view. In 1886 it became incorporated by Act of Parliament, with an annual grant from the Public Treasury of $500, and the free publication and distribution of its annual reports. Later on it secured the appointment of a Foul Brood Inspector, at a cost to the country of another $500 yearly. (The Inspector is a Provincial officer under the guidance and control of the Association.) Add to these achievements the procural of at least $5,000 of the public money granted and expended in connection with the London and Chicago honey shows, and it presents a record of activity and success that will challenge comparison with any like association in the world.

Some features of the Association's stability are the following:

It has a Board of 13 directors—not accidentally chosen, but each residing in, and representing one, of the 13 districts into which the Province is divided by Act of Parliament. The directors are paid their expenses in attending meetings, and they, together with the Secretary and Treasurer (both of which are paid a reasonable salary), constitute a permanent executive body, around which there is little difficulty in gathering the desired number of members. The Act of Incorporation requires 50 *bona fide* members on the roll to secure the Government grant. Our Constitution provides for these without much effort on the part of the Directorate. Under its provisions Local District Associations may affiliate with the parent society; and severally participate in the grant of $200, which is annually appropriated for distribution amongst them. One of the conditions of affiliation is, that each local association must have on its roll the names of at least five bee-keepers who are members of the Ontario Bee-Keepers' Association. Last year we had 13 such district associations in affiliation, in which there was of necessity 65 men who were members of the parent society. Apart from other sources, we had in these affiliated societies more than the required number of members to insure the Government grant.

The Association has not contented itself with securing incorporation and

its attendant money grants, but has sought to attract attention to the excellence of our honey by large and attractive public display of it. Its first great effort in this direction was made in 1886, when at the Colonial and Indian Exhibition, in London, four of the Association's delegates set up the largest display of honey ever yet made. It exceeded in quantity the combined displays at the Chicago Fair, and attracted the attention of the world to the honey-producing capabilities of Canada. Twenty-seven members supplied the whole display, and gave the delegates *carte blanc* to do with it as they deemed best.

The delegates took advantage of the license thus accorded them, and gratuitously distributed four tons of honey by way of advertisement. All kinds and classes of people, from Queen Victoria to the children of the charity schools of London, participated in the gifts. Notwithstanding this, and the expenditure of some $2,000 for labor and material in connection with its sale, the contributors received back 10 cents a pound for extracted, and an average of 16½ cents for their comb honey, on the total amount of their contributions, and were also paid the cost of the glasses and tins in which they put it up.

Advantage is also taken of the opportunity the Toronto Industrial Exhibition offers to keep the product of the apiary before the people of the Province. Though the industrial is largely a Toronto enterprise, it has much of a Provincial character. Its directorate embraces delegates from all the incorporated industries in Ontario. Our Association is entitled to two members on its Board, through whose instrumentality very liberal prizes are offered for honey and bee-keepers' supplies. The prize-list makes it possible for several exhibitors to carry off $100 in cash, and one or more medals besides. The exhibitor is also accorded the privilege of disposing of his honey at retail; provided he does not impair the attractiveness of his exhibit. The show lasts 10 days, and is largely attended by people from all parts of the Dominion, thus offering inducements to exhibitors rarely found outside its grounds. Advantage is taken of this annual opportunity by a number of our best bee-keepers to make an exhibit of honey that is alike a credit to themselves and the industry they represent. These exhibitions have had no little effect in securing a home market for the honey produced in the country at prices that cannot be exceeded in foreign markets.

Thus far I have dealt mainly with men and methods. The scope of my essay demands a word or two on the quality of Canadian honey, and the sources from which it is procured. In briefly adverting to this part of my subject, I know I am treading on dangerous ground, considering the company I am in at present, as my previously expressed opinion has been warmly resented by some of you good people, but that does not disprove the fact that Ontario honey, in the aggregate, cannot be surpassed in point of quality by the product of any other State or county. If our barley be better and brighter, if our apples possess better keeping qualities, and a finer flavor than like products of any State or county in America, is there anything surprising in the superior excellence of our honey? The character of our soil and climatic condition explains the desirable qualities in our barley and apples, and these have something to do in determinating the quality of honey. It is a recognized fact that the character of a plant may be greatly modified by the soil from which it grows, by moisture, temperature and light. Such modifications produce a corresponding change in the economic products of plants of like species. But the main cause of the excellence of our honey is found in the fact that all, or nearly all, surplus is secreted by plants and trees universally recognized as producers of high-grade honey. Clover, basswood and Canada thistles are the sources from which our surplus honey comes. The result is that it is all bright and good. This is true of the entire product of the Province, except a limited portion of the eastern part of it, where buckwheat is pretty extensively grown. At all the Fairs I have attended in Canada, I have not seen 100 pounds of dark honey on exhibition, and I have seen at least 100 tons of Canadian honey on exhibition.

I shall not even attempt to give an outline of the style of hives used in Canada, or the system of manipulation prosecuted as they are both practically identical with your own; besides I have spun out this essay to a length far exceeding my original intention, and probably your patience as well.

In closing, let me extend to the ladies and gentlemen present at St. Joseph a fraternal greeting, assuring you of my earnest wish that your first national meeting in the far West may afford pleasant reminiscences to those present, as I have no doubt it will be profitable to the brotherhood of bee-keepers everywhere.

R. McKNIGHT.

Mr. Charles Dadant, of Hamilton, Ill., honorary member of the Association, having been prevented, through illness, from preparing the essay, "Bee-Keeping in France," announced on the program, the Association by a unanimous resolution requested him to present such an essay for publication in the proceedings of the convention. Mr. Dadant has complied by sending the following interesting article:

Bee-Culture in France.

The recent progress in bee-culture has been accepted very slowly in France, and I think that this slowness can be attributed to the profits obtained by the methods used in that country before the invention of the movable-frame, and to the relatively advanced knowledge of bees, as well as to the poor results given by the first experiments made with movable combs and frames, which were, at first, far from giving as good results as the straw hives with or without surplus caps, or made two or three stories high.

A considerable industry in honey-production had grown, not far from Paris, in Gatinais, where the best known honey-producing plant, the sainfoin or esparcette, was largely cultivated. This sainfoin (healthy hay), which belongs to the leguminous family, like alfalfa and clover, and which, unfortunately, does not succeed here, not only gives the best food for farm animals, but it gives also the best honey, and about as abundantly as the sage of California. Yet, as the flowers of Gatinais, save during the blooming of the sainfoin, were unable to support a number of bees adequate with the honey which could be harvested in this part of the country, its bee-keepers became bee-buyers and bee-killers; so, two large occupations, one of rearing bees, and the other of harvesting honey, were created.

For several hundred miles around, most of the bee-keepers reared bees with the purpose of producing not honey, but swarms, which were sold from three to four dollars apiece in the spring, some *Gatinaisiens buying a thousand of them or more.* These swarms transported to the fields of sainfoin, were smothered with sulphur, as soon as they had filled their hives, to get their honey and beeswax.

As this mode of bee-culture, or rather bee-killing, was profitable to both the bee-breeder and the bee-killer, progress was to them undesirable; for they anticipated that a change of method would ruin their business, by teaching bee-keepers at large, how to produce honey without destroying bees; and Mr. H. Hamet, founder and publisher of the joural, *L'Apiculteur*, of Paris, sided with them to stop the progress.

I ought to say that bee-culture with fixed combs had progressed as far as possible in France, under the influence of the writings of Reaumur, Palteau, de Gelieu, Lombard, Huber, etc., and that the attempts at using movable-combs, according to the teachings of Della Rocca, Debeauroys and others, had failed.

Such was the condition of bee-culture in France when Mr. Bastian tried to introduce the German movable-frame hive, and Mr. *L'abbe* Sagot a hive of his own invention, with movable ceiling, like the Langstroth, but smaller in size. Both these bee-keepers had described their hives and methods in the *Apiculteur* of Mr. Hamet, when one of my neighbors, while in Paris, visited this editor, to subscribe to his paper for me. Mr. Hamet entreated him to ask me to send him some articles on bee-culture in the United States. Of course I complied gladly, especially when I saw how far behind France was in bee-culture.

It was in 1868. My first articles were welcomed; but as soon as I began to praise the Langstroth and Quinby hives, ranking them above all the fixed-comb hives, Mr. Hamet, becoming angry, was so impolite that, for several years, nobody cared to write, for his paper, anything in favor of the movable-comb.

Fortunately, some agricultural papers were ready to accept our writings, and, besides, one or two other bee-papers were started, but they did not last. Then Mr. Ed. Bertrand began, in Switzerland, the publication of the *Revue internationale d'Apiculture*, which has scattered the knowledge of the new hives and methods not only in Switzerland, but in France and Belgium, and even in Russia, where the French language is spoken by the high classes.

Mr. Hamet began, at last, slowly and reluctantly, to accept the new hives, and now his successor seems to put them on the same level with the old ones. Yet he considers the old straw-hive as good as any frame hive for the greatest number of bee-keepers.

Now, in spite of all the opposition, the movable-frame goes forward in France. Unfortunately, although all the hives have movable ceilings, like the American, there are too many different sizes and shapes of frames in use; and their number has been on the increase.

About two years ago an influential French bee-keeper, in order to get a vote

giving the preference to his frame (12x12 inches), induced the Central Bee-Keepers' Society of France to select a frame which would be acknowledged as official. Yet he did not succeed in his undertaking, for there were three parties in presence; one for the square frame, another for the Quinby-American, and a third for the King-American—that is, higher than long. Besides, as a part of the bee-keepers present at the convention used fixed comb hives, and as the others could agree only on the superiority of a large size, the convention selected three frames; one square, 14x14 inches; one high, 16x12 inches; one low, 12x16 inches; each having a surface of about 200 square inches.

Of course this selection was made to please everybody—the amateurs of the square frames, those of the high, and those of the low frames; but it was not made after comparative experiments to choose the best, but according to the fancies of the voters. As not one of these three sizes had been used before, the number of shapes and sizes, which was already too large in France, would have been increased without any rational motive; but such a ludicrous decision, made by incompetent and stubborn bee-keepers, had no bad results; for it is already about forgotten, and the two frames, which were the most in use—the King, under the name of "De Layens," and the Quinby known as "the Dadant," continue to be sold by the manufacturers at the rate of ten to one of the official frames.

To sum up: The movable-frame hives are not as prevalent in France as in the United States, yet their progress is increasing every year, and their adversaries have vanished. I may add that, *after comparative experiments*, the preference of the majority of bee-keepers, using the French language, is incontestably in favor of a frame and hive far larger than the regular Langstroth.

CHAS. DADANT.

The contents of the question-box not having been exhausted, it was voted that their consideration be resumed.

Substituting Syrup for Fall Honey.

Question No. 8.—"Is it advisable to take the fall honey from the brood-frames and substitute syrup?"

Frank Benton—No.

Question No. 9.—"What is the best section foundation fastener?"

No answer given.

Paper for Winter Packing.

Question No. 10.—"Is paper a good winter packing?"

Dr. C. C. Miller—Yes.

Mr. Benton—Very excellent, indeed.

C. P. Dadant—Yes, provided you don't leave it on too long. They will gnaw it.

Pres. Abbott—It is the best thing that I have found, provided you use my sugar cake. If you let the paper extend out where the water can get at it, it will draw the moisture in.

Distinguishing Robber-Bees.

Question No. 11.—"In what way can we distinguish robber-bees?"

Pres. Abbott—Watch them and see if they bring any honey out.

The "Adel" Queens.

Question No. 12.—"What are Adel queens, and what is the meaning of the term?"

Frank Benton—I believe I first used this term in connection with the English language. It seems to me that Mr. Alley has misapplied it, but I do not know that I care, only it is best for the fact of this misapplication to be known. The word *Adel* in German means "the nobility," and is from the old Anglo-Saxon word, *athel*, meaning "noble." The adjective forms are *adelig* and *edel*, which may also be translated "noble." The pronunciation of *e-d-e-l* in German is *a-del* (accent the first syllable, giving *a* the long sound), therefore I chose the latter in order to preserve in English the sound of the word which is in common use in German. It has been used by some European bee-keepers to designate their choicest breeding queens, and, in itself, has no reference whatever to race. Nothing of the kind. It can be used for Italian, Cyprian, black or any other varieties of queens, and has been applied to them all. *Select* queens of any well-established race or variety may properly be called "Adel queens." But it cannot correctly be applied to hybrids or cross-bred bees, nor to sports which have not been bred until they constitute a permanent and distinctive type, hence it seems to me a misapplication to use it in connection with those yellow bees which are being offered as Carniolans. When I introduced it I used it to represent such Carniolan queens as were relatively well-developed and typical specimens of their race. Gray being the distinctive color of this race, such queens were bred from mothers producing only gray workers—the type so largely predominant in Carniola. When applying the term to Ital-

ians, it would of course be understood that Adel queens produced bees having the yellow bands and other marks distinctive of that race, the queens themselves being, of course, finely developed specimens.

Brood-Rearing in the Fall.

Question No. 13.—"How late in the fall is it desirable that brood-rearing should continue?"

F. H. Richardson—That depends altogether on the climatic conditions, and also the condition of the colony. That can't be answered for any two sections alike.

Extracting and Feeding Back.

Question No. 14.—"Will it pay to extract, and then, when the flow has ceased, contract the brood-chamber and feed back, especially to fill partly-filled sections?"

A. I. Root—Under certain circumstances.

Mr. Richardson—That is a very much disputed question. I don't think a discussion of that will be of any benefit to us here, and the best thing for the party who asked that question is to experiment for himself. It all depends upon a man's bees.

A. I. Root—In preparing colonies for winter we ought to get them on a small number of combs. By extracting and contracting the combs this can be brought about. In regard to these unfilled sections, if you have some sections that are nearly completed, it might pay to feed enough honey to get these completed, but when it comes to filling a great number of sections wholly, there will be so much honey wasted in getting them capped over that it will not pay. If you have to melt it before you feed it back, it will granulate in the combs.

Mr. Holtermann—It will not pay.

Dr. Miller—When you feed back, this granulation is likely to take place. That is one great objection to the business. I have practiced it quite a little, and I have never made it pay.

C. F. Lane—I have had considerable experience with this feeding back. I have practiced it for four or five years. I don't extract; I feed it back from the natural comb, but it is tedious. If I have in the fall some bees—perhaps a dozen colonies which are poor, and in which the queens may not be doing well, I combine them so as to get them into two hives, and these I place under a tent and tier up the unfinished sections about ten crates high on each. I take the combs of honey and uncap them and tier them up around these bees, and in that way the bees will take it all out, and there is no robbing or anything of that kind. As near as I can tell, the loss is about one-third. I have weighed many, but the nearest I can tell is about one-third. Another way is, I have a large tent about 20x40 feet, and I put in about 15 colonies, and after keeping them in there for awhile, they will become accustomed to the looks of the place, and will work in there. On the other side of the tent I put the combs of honey, and the bees take the honey out and fill the unfinished sections.

Production of Comb Honey.

Question No. 15.—"Are there any new suggestions in the production of comb honey?"

Mr. Holtermann—I put that question in the box, and it was the first one put in. I think there is a little point which I have not known before, and that is the importance of a bee-space above the sections. We are all after having our sections filled as much as possible. Not only does it add to the appearance of the honey, but the strength of it in shipping. I have found that by putting a quilt or cloth over the sections, there is no space over the sections for the bees to pass, and therefore they are liable to put propolis on the tops of the sections, while if there is a ¼-inch space left over the sections, you will get a very much nicer-looking section.

Supply-Dealers at Conventions.

Question No. 16.—"Is it desirable to have persons in attendance at our conventions who are interested in the sale of supplies, but are not themselves bee-keepers?"

Mr. Benton—Yes.

J. T. Calvert—I will say this, that I have had charge of the apiary of A. I. Root for three successive years, and I am still interested in bees.

Dr. Miller—This shows you what a bad conscience will do. There has been too much of the feeling that there is a certain amount of antagonism between the supply-dealers and the honey-dealers, between commission-men and honey-producers. Just take the supply-dealers, if you please. Do we want the supply-dealers to exist? Will you and I be better off if they are all hanged. Take the matter of sections. I would not want to sit down and make them myself with a knife for $5 per thousand, and that is what the best will cost. And the very fact that we can get them so cheap is on account of these men here spending time

to find out how they can make these things for us. They are our friends. There has been a feeling that we don't want anybody here but bee-keepers. I think that we want to have our friends with us, and sometimes they suggest things to us that we want to know. I think this ill-feeling should be done away with. I don't want to feel that my friends can't go where I am. We want to talk together and consult together, and I would like to see this antagonism done away with.

Pres. Abbott—I don't know whether it would be in order for me to make a speech that I have been wanting to make in regard to supply-dealers. A supply-dealer has a right to be, and if he has a right to be, he has a right to be at the convention. If he has a right to exist, he has a right to be at the convention. There are a great many people who think they have said the thing when they say, "I want to get rid of the middle-men." That word moves glibly off of their tongue. They have the idea that no one is a producer except the man who takes out his big knife and whittles a stick in some shape. The man who takes a stick and turns out a rolling-pin is a producer, and any man who has anything to do with that rolling-pin until it reaches the consumer is a producer also. Here is a man who produces rolling-pins. He lives in Canada. I want a rolling-pin, and I live in St. Joseph, Mo. He might produce thousands and thousands of them, but they would do me no good. I could not afford to pay my fare and go up there and buy one, and the result necessarily would be that I would never get a rolling-pin. Do you see the point? I claim that every one is a producer who gratifies a desire, and every one gratifies a desire who furnishes to the man who has the desire the thing he wants at the time he wants it, in the condition he wants it, and in the quantity he wants it; and a man who takes rolling-pins under his arm and carries them down to St. Joseph and lays them down on this table, and leaves them there until the people's wants are all supplied, is just as much of a producer as the man who turns them out of the wood, and it is all bosh about these people not being producers! I was a drummer a good many years ago, and one day I was walking along the road, and a farmer came along with a team, and I asked him for a ride. After I got in the wagon we fell to talking about different things, and at last it got to middle-men, and he said, "We are going to get rid of those middle-men." He did not know he had one right in his wagon, and I did not tell him, because I hated to walk. I do not say this to show what I have done, or to puff myself up in the least, but I do say that because of my having been a supply-dealer in St. Joseph, I have done more to educate the people in regard to honey than any other man, and it is true of every supply-dealer who sticks to the business in any community. I do wish that this cry about middle-men would stop, as it is all foolishness.

Mr. Holtermann—Who is, after all, as much interested in the success of the bee-keeper as any? Not success just for the moment, but permanent success. It is the man who is in the supply business. Isn't he as much interested as any other person in the world. If he is level-headed he will work heart and soul for the success of the bee-keeper and for his interests, and in that way develop the industry.

Mr. Root—There are some good men among the commission-men in St. Joseph, and I rather think there are some who deal in honey. I think it no more than fair that the North American Bee-Keepers' Association should invite these men up here to talk. When we get acquainted with these people sometimes we find that they are not so bad after all. We have met a good many good people here, and we are going home with a great deal more faith than we had when we left home. There are quite a good number of good people in Missouri.

Pres. Abbott—There is not a honey-man in the commission business in this city. There are three or four men who handle honey, but there is not a man engaged in handling it that knows anything about it. I speak advisedly. Just to illustrate how much these men know about honey, I will tell you something. Three or four years ago I got a letter from one of them, and he knows as much about honey as any man here in the city in the commission business. He said in the letter: "I hear that you have a honey-extractor, and I would like to have you call at my place of business." I called at his place of business, and he asked me if I had a honey-extractor, and I said, "Yes, I have." He said that he had some honey in cans that he could not get out, as it had gone to sugar. He said that he bought it of an old farmer and paid him $50 for the whole lot, and he said, "I will be out just $50 unless I can extract it. Will you do it for me, and what will you charge?" It was there in the cans, comb and honey, and it had all candied perfectly solid. I said,

"We do not extract that kind of stuff, and it is not fit to eat if it is extracted." He said, "Well, if it cannot be extracted I am out just that much." I said, "Well, you are out just that much, but I hate to see you lose all of it. I will tell you what to do with it. Get the wax out of it, and then what honey is left take it down to some tobacconist and ask him if he does not want something to spoil dirty tobacco with, and maybe he will give you a few cents for it!"

The regular program was then taken up, and in the absence of the author, the following essay, by Mr. S. E. Miller, of Bluffton, Mo., was read by Dr. C. C. Miller:

Honey-Resources of the Future.

As civilization advances, the forest falls before the woodman's ax, and much of the unused land that produces flowers is turned under by the farmer's plow, while barbed wire is making the old-fashioned rail fence of our fathers a relic of the past; hence the fence-corners where grew white clover and other honey-producing plants are no longer there.

As land becomes more valuable it is more thoroughly tilled, and less of it is allowed to lie idle, and in a number of other ways, land that once supported a multitude of nectar-yielding plants and trees, is turned to the production of corn, wheat, and other crops that yield little, if any, nectar. Every basswood that is felled within a certain radius of our apiaries, must mean that our bees have access to a certain number of pounds less of nectar than they had while that tree was standing. Every white clover field that is turned under within the same radius means that our bees are curtailed to a certain extent.

Considering this, what will be our resources in the future? What is to take the place of the flora that has been so bountifully disseminated by a loving Creator, when that flora has fallen before the hand of civilization? True, we might pack up our bees and move to a new and unoccupied field, but even this cannot last always. The sage-bush of the wild West is being rooted up to give place to orchards and vineyards. Even if it were always practical to secure good pasturage by frequently moving, this course is not suited to the taste of a bee-keeper, for if I mistake not he is one who loves to have a home, and loves that home more than any other spot on earth. What, then, can we grow to take the place of these native plants, so that we may be reasonably sure of having something from which our bees can gather nectar in sufficient quantities to give us a crop of honey that will pay for our time, labor and money expended, and leave us at least a small profit?

I for one believe that we cannot urge too forcibly the prudence of taking care of that which we have. Often land that is too uneven to admit of cultivation may be devoted to pastures, and here is where we may spare such trees as basswood, maple and others that produce nectar and pollen. No doubt many bee-keepers are owners of tracts of woodland, and when clearing up the land for pasture, if all nice basswood trees are left standing, they will be no hindrance to the grass that grows beneath them, but often a benefit by keeping the ground cool and moist beneath them, while the ground where no trees are standing, will be hot and dry, and the grass parched.

The maples, while they do not produce any of the surplus honey, contribute in an indirect way toward it, as they produce an abundance of pollen, and (according to my observations) some nectar, just at a time when most needed. These two, then, should be spared whenever practical, for if we speak of the sugar-maple alone, it is a producer of another sweet that in the opinion, or on the palate of many, surpasses even honey, and in this way may be an additional source of revenue to the owner of the land; besides, both the maple and basswood are elegant and noble shade trees. What I have said about these two applies to my own part of the country. To what trees the above suggestions will apply in other parts of the country, each one must know for himself.

Before leaving this point, I might add that those bee-keepers living in or near a town would do well to exert themselves in inducing the town's-people to plant basswood trees in preference to other kinds, and I believe one could well afford to furnish the trees at his own expense if he intends to continue in the bee-business for a number of years. To what extent the planting of basswood trees is practical on the treeless wastes of the far West, I am not prepared to say, as I do not know whether they will live and thrive there, but to those who live there it may be well worth considering.

In every way possible we should use our influence to prevent the destruction of basswood trees. Often a neighbor might, by a little solicitation, be pre-

vented from destroying such trees, even on his own land.

I cannot leave this subject without speaking of the clovers, for upon this class of plants a vast number—perhaps a great majority—of the bee-keepers of the United States must depend for their surplus, and as time passes we must each year become more dependent upon these. Clover is a crop that should be grown upon every farm in the land that is adapted to it. I venture the assertion that 90 per cent. of the farms that are adapted to it would be highly benefited by a thorough rotation of clover, corn, wheat and the other farm crops. What kind of clover, then, shall we grow? Of the alfalfa it is not necessary for one to speak, for it has already proven itself to stand in the front rank among the honey-producing plants of our country. In that part of the country to which it is adapted, no doubt, it stands at the head among cultivated crops, and the bee-keeper can hardly hope to find a crop that is profitable aside from the nectar it yields, which will furnish a greater amount of valuable pasturage for his bees.

But in the majority of States to which alfalfa seems to be well adapted, we must look for another plant in which we can induce the farmers to become interested. This we have in Alsike clover. This clover seems well suited to all lands where the common red clover thrives, and is at present about as profitable a crop, and, in some cases, even more profitable. My own experience is that it does not make as much hay per acre as the red does, but it is of enough finer quality to make up for the difference in bulk. Here, it seems to stand drouth and pasturing better than red clover, holds its own against weeds and will stand and produce good crops for a year or two longer than red clover. It produces about as much seed per acre, and the seed is always higher per bushel than that of red clover. In this, then, we have a profitable farm crop that is well suited to a large portion of the country. As to the amount of nectar it will yield, no one can more than conjecture, but from what observations I have taken, I would place it ahead of the native white clover, taken acre for acre.

I have only mentioned the name of red clover, so far, and need scarcely say more. That it often furnishes an abundance of nectar we are all aware, but that the bees can seldom procure it we are also aware, notwithstanding the claims that some make that their bees can get the nectar from red clover. Bees do certainly work on it at times, but I think seldom enough is gotten to amount to a surplus.

Honey from alfalfa clover can now be purchased by the ton. How soon the same may be said of Alsike clover honey no one knows. But it is quite evident that the honey of the future will be gathered mainly from some one of the many species of clover—the king of honey-producing plants.

S. E. MILLER.

On motion of George W. York, Pres. E. T. Abbott was requested to describe in full his method of wintering bees, for publication in the proceedings of the convention, which he has kindly done in the following article:

The Wintering of Bees.

The various bee-papers are filled with articles giving instructions how to feed bees in the winter, after reading which I feel like saying in most cases, "Don't." One writer prominent in apicultural circles instructed his readers who might have bees short of winter stores, to take them into a warm room and feed them sugar syrup. Just think for a moment how much trouble and "fuss" this would involve! Moreover, from my stand-point, the method is not only unsatisfactory, but utterly useless.

The instructions commonly given are to buy a feeder and feed the colonies that are short of stores, sugar syrup, early in the season. In lieu of this, some say to fill empty combs with syrup by placing them in a large pan, and holding the vessel containing the syrup so high that the syrup will be forced into the cells by pouring it on the combs. This, too, it seems to me, is another mussy and useless process.

However, you are not interested in negatives, and I will give what seems to me a positive and easy solution of the winter problem. It will be necessary first to get a few simple facts fixed clearly in the mind. It is important to remember, first, that in this climate bees do not *freeze* in the winter, but *starve*. I am half inclined to think that this is true in any climate where bees are kept. If I were asked to state the secret of successful wintering in a few words, I would say, "Plenty of food in the *right place*. The right place is *above* the cluster. Let me explain why this is true:

Every one knows that it is a natural law that heat rises, and those who are at all acquainted with the habits of bees know that as soon as the cold weather

sets in they will form themselves into a compact cluster near the center of the hive. They do this in order to keep themselves warm. One bee alone, especially if its honey-sac be empty, will perish in the cold in a short time, while a cluster of bees with well-filled honey-sacs can resist the hurtful influences of intensely cold weather. By uniting in a cluster they build around themselves a living wall, as it were, which is a non-conductor of heat, and thus are enabled to confine the combined heat of their bodies in a small space. Should one thrust a thermometer into the center of a cluster of bees in the winter, he would, no doubt, be surprised to find how warm they can keep themselves, if he had never before tried the experiment.

When the bees on the outside of the cluster have endured the cold as long as they can, they step aside and pass into the center of the cluster, where it is always warm, and other bees take their places in this living wall of protection; and thus the cluster remains perfect as long as the cold weather lasts.

Now, this cluster, as a whole, can move only one way, and that is in the direction in which heat always moves—upwards—as stated before. It can follow the line of heat, but it cannot move sidewise from one frame to another, or lengthwise on the frames. If one will think for a moment how most modern hives are constructed, and how shallow the frames are, he will readily understand why it is that so many colonies of bees die in the winter with "plenty of honey in the hive."

In the months of January and February, even in this climate, there is generally a long spell of very cold weather. During this time the cluster is moving toward the tops of the frames, consuming as it goes, all of the honey in the frames immediately above it. The cold weather continuing, it finally reaches the top of the frames, and can go no farther in this direction. It cannot disband and move over to other frames, neither can it move lengthwise on the frames it now occupies. What is the result? Having consumed all of the food in their honey-sacs, and not being able to reach any more, nor live on wood, the bees die of starvation. Had the weather turned warm for a few days, so the cluster could have broken up and the bees "taken a flight," they then would have formed in another locality on the frames, or else would have carried sufficient food into the combs where they had clustered before to carry them over another cold spell of reasonable length.

We cannot, however, depend on the warm weather to come at the right time, and so we must devise some method by which we can guard against such mishaps as mentioned above, and thus be able to take our busy little workers safely through the winter, and keep them strong and healthy, so they will be ready for brood-rearing in the spring.

It is very important that bees be kept as quiet as possible after they cease work in the fall. A worker-bee has a very delicate nervous organization, and therefore wears herself out in a short time when she is actually engaged in storing honey. If she is to live during the winter and long enough in the spring to rear bees to take her place, she must be excited to as little activity as possible after her honey-gathering ceases. It is not only necessary, then, to feed the bees so that the food will be above the cluster, but it is also important to feed them so they will be disturbed as little as possible. I will now give a method of preparing them for winter which I think fully meets both conditions.

A colony of bees will live through the winter and keep healthy if they have nothing but dry sugar to eat, provided the sugar be so placed that they can always reach it without breaking the cluster. Dry sugar, however, cannot be manipulated in a way to guarantee this condition of things. I, therefore, secure the best quality of granulated sugar, and make it into solid cakes similar to those of maple sugar which we find for sale in the stores. To prepare these sugar cakes, the granulated sugar should be put into a vessel with a very small quantity of boiling water—not more than one pint of water to five pounds of sugar—and the sugar thoroughly melted. Be careful not to let it burn. After the sugar is melted, let the syrup boil until it will harden into a solid cake. One can ascertain when it has boiled enough by dropping a little of it in cold water. After it has boiled so it will thoroughly harden, pour it out into shallow pans, making it into cakes six or eight inches long, an inch and a half thick, and wide enough to make the cake weigh eight or ten pounds. When the cakes are thoroughly cold and hardened, they are ready for use.

It is not necessary to put acid or anything of that kind in the syrup to keep it from granulating, as the bees can eat it just as well when it is granulated as when it is not.

Having prepared your cakes of sugar in this way, remove the top of the hive and the covering to the frames, and lay

three or four sticks, ½ inch square and six inches long, directly over the cluster, placing them about two inches apart. Lay the cake of sugar on these sticks, and over this place a cloth sufficiently large to cover the entire top of the hive. An old grain-sack makes a very good covering for this purpose. Over the cloth place two or three thicknesses of old paper, and tuck all down snugly inside of the hive. After this is done, put on the hive cover. It will be necessary to not leave the edges of the cloth or paper exposed to the rain or snow, as this would attract moisture into the hive. The idea is to make the covering above the bees perfectly tight, so that there is no upward draught.

As I said before, the cluster always forms on the combs below the food, and as it moves upward, it consumes the food immediately above it until it reaches the top of the frames, when the bees will find themselves in contact with the sugar candy. The warmth and moisture arising from the cluster will keep the sugar sufficiently soft so the bees can eat it without any trouble. I have never known a colony of bees, thus provided with sufficient sugar to take them through the cold weather, to die or to come out in the spring diseased.

This method of preparing winter food for bees is so simple that it has been a wonder to me that more people did not practice it. As soon as the warm weather sets in, in the spring, if the bees have not consumed all of the sugar, it should be removed and made into a thin syrup, and fed to the bees to stimulate brood-rearing.

EMERSON T. ABBOTT.

The National Bee-Keepers' Union

GENERAL MANAGER'S

10th Annual Report,

FOR THE YEAR 1894.

In making this, my Tenth Annual Report to the members of the National Bee-Keepers' Union, I am glad to state that the Union has everywhere exerted such a soothing influence, that now the enemies of the pursuit are very cautious in commencing a suit against bee-keepers. Lawyers have read in their Law Journals reports of trials which have resulted disastrously to the complainants, leaving them to pay the costs, and they generally discourage such litigants unless they have well-filled pocket-books, and they discover a chance to make liberal fees. Even then, many of them will not undertake a case which gives no promise of success. Quite often they advise their would-be clients to send to the Bee-Keepers' Union for documents, and when such are received and read, the arguments of Judge Williams and the decision of the Supreme Court of Arkansas are so convincing, that they quite willingly nurse their wrath, and permit their bee-keeping neighbors to enjoy their rights and privileges.

THE WOODBERRY CASE.

The Woodberry case in California, mentioned in my last Report, has not been heard from since then. It was evidently killed by the liberal distribution of the legal documents furnished by the Bee-Keepers' Union. Indeed, the good work done in that State is fully attested by one of our members, Mr. Fred M. Hart, of Traver, Cal., when sending his

dues and vote, last January. He wrote thus:

"The fruit raisers of this locality have been very peaceful since the Union gave them such a dose of medicine two years ago, by the distribution of the decision of the Supreme Court of Arkansas determining that the keeping of bees was a legitimate pursuit, and cannot by law be considered a nuisance.

"The Union has been a grand success in Central California, assisting bee-keepers to maintain their rights, as well as in showing the fruit raisers that the bees are their best friends instead of their enemies. I hope it will be as successful everywhere else.

"I know that my 175 colonies of bees do not injure my fruit, and I have some 20 varieties of fruit on my 20 acres of land. It would take considerable to induce me to entirely move away my bees from my fruit farm, for I do not believe that my fruit would be any way near as productive."

BEES AND FLOWERS.

Being fully cognizant of the fact that much ignorance exists in the minds of horticulturists and others concerning the proper relation of bees to fruit of all kinds, I have issued a 4-page pamphlet on the subject, the main portion of which is an interesting essay, prepared by one of our members, Mr. C. P. Dadant, and read before the Farmers' Institute, at Hamilton, Ill., last February. Copies of this small pamphlet have already done excellent service where trouble was apparently brewing between apiarists and fruit-growers. The generous distribution of these educators in such localities, generally produces a sudden change of opinion relative to bees and their supposed injury to fruit. A copy of this is sent out with this Report, and will repay a careful examination.

ADVICE SOUGHT.

Many letters have been received asking for assistance and advice, in cases where trouble was threatened. These have been carefully considered and answered, giving advice and instructions how to proceed, if the documents which invariably accompany my replies did not allay the trouble.

CANADIAN MEMBERS.

Inquiries from Canada have come to hand, asking whether the Union would defend its members in that Dominion, the same as if they resided in the United States. Some of these also requested that the reply be incorporated in my next Annual Report. It is, therefore, given a place here. The answer is plain and explicit—the National Bee-Keepers' Union knows no dividing lines of States, Provinces or Territories—

"No pent up Utica contracts our powers,
The whole unbounded Continent is ours."

The Union defends its members from the assaults of the enemies of the pursuit—no matter where they may happen to reside—if, upon investigation, their lawful rights and privileges are found to be unjustly assailed.

QUARRELSOME NEIGHBORS.

Mr. George M. Deer, Riga, Mich., was threatened by a jealous old-fogy neighbor, who insisted upon unnecessarily working his horses at noon close to his neighbor's bee-yard, and hitching his horses to the fence in order to cause them to be stung, and thus to incite the surrounding neighbors to demand the removal of the bees. As this involved important points, I wrote the facts to President R. L. Taylor, who is a good lawyer, requesting him to give his opinion concerning the points involved. His reply was as follows:

Here, as in most if not all the other States, the law on the point is unsettled by statute or direct decision of the Courts; so we must fall back upon the principles of the common law, in order to form a judgment. My opinion is, that in such a case, the bee-keeper would be required to use such care in providing against injury to others, as a judicious person would use in conducting his affairs; that he would be responsible for the results of his own carelessness, but not of another person's carelessness. I would like to see a good, fair case of this kind tried, so that we might have something to guide us.

I think Mr. Deer would do well to put up, if possible, a high, tight fence or other

"break," to cause his bees to rise on leaving his premises; also to kindly warn his neighbors when they are incurring danger. Any machine which jars the ground, such as a heavy road-scraper, if used near an apiary, is the source of extreme danger; but ordinary operations are not very likely to cause trouble. My neighbor plows and runs a reaper and mower quite frequently close to my large apiary, there being only a picket fence between. R. L. TAYLOR.

A decision of the Courts on these important points would do much to allay the animosities of quarrelsome and jealous enemies of the pursuit.

MISSOURIANS ON THE WAR-PATH.

The City Council of Stanberry, Mo., was petitioned in a lengthy document, numerously signed, to pass an Ordinance excluding the bees from its corporate limits. At the request of several apiarists there, the Union dosed the Mayor and Council with the decision of the Supreme Court of Arkansas, and that cured the difficulty. The Council dared not grant the petition.

THE HUNT ADULTERATION CASE.

Last January it was reported that F. H. Hunt, some time ago living in Linn County, Iowa, but now residing in California, had put a lot of adulterated honey on the market at St. Paul, Minn. It was analyzed and proved to be heavily adulterated with glucose. Minnesota has a good law against adulteration, and the Bee-Keepers' Union acted in concert with the Pure Food Commissioners and the local Bee-Keepers' Society of that State, and made such a stir about the matter, that Mr. Hunt dared not show himself there to sell the adulterated stuff. Many were on the alert, watching for him, and would have made it lively for him, if he could have been found there. The stuff was not offered for sale there, and what became of it no one seems to know. Mr. Hunt is the same person who some 10 years ago sold a lot of adulterated honey in Omaha, Neb., and was exposed by Mr. Von Dorn.

ELECTION OF OFFICERS FOR 1894.

There were 212 votes received up to February 1st, 1894, (when the polls closed,) and were as follows, re-electing all the Officers of the previous year:

FOR PRESIDENT—Hon. R. L. Taylor, 169; Hon. Eugene Secor, 7; Hon. James Heddon, 6; G. M. Doolittle, 6; Dr. C. C. Miller, 5; A. I. Root, 4; Dr. A. B. Mason, 3; Capt. J. E. Hetherington, 1; W. Z. Hutchinson, 1; C. F. Muth, 1; Byron Walker, 1; blank, 8.

FOR VICE-PRESIDENTS—G. M. Doolittle, 185; Dr. C. C. Miller, 180; A. I. Root, 174; Prof. A. J. Cook, 158; G. W. Demaree, 157; Hon. Eugene Secor, 13; Hon. R. L. Taylor, 12; George W. York, 11; Chas. F. Muth, 9; Hon. James Heddon, 9; C. P. Dadant, 8; Mrs. Jennie Atchley, 7; W. Z. Hutchinson, 5; Ernest R. Root, 4; Mrs. L. Harrison, 4; Hon. J. M. Hambaugh, 4; P. H. Elwood, 3; J. H. Martin (Rambler) 3; R. F. Holtermann, 3; T. F. Bingham, 3; Jos. G. Banning, 2; J. F. McIntyre, 2; Dr. A. B. Mason, 2; Hon. George E. Hilton, 2; R. C. Aikin, 2; A. F. Randall, 2; S. I. Freeborn, 1; S. E. Miller, 1; C. W. Dayton, 1; J. W. Le Roy, 1; G. W. Brodbeck, 1; W. B. Stephens, 1; Frank Benton, 1; C. H. Dibbern, 1; A. N. Draper, 1; H. R. Boardman, 1; C. Theilmann, 1; E. Hasty, 1; F. Wilcox, 1; H. P. Langdon 1; Hon. C. Grimm, 1; B. Taylor, 1; Capt. J. E. Hetherington, 1; T. G. Newman, 1; L. C. Axtell, 1; E. J. Baxter, 1.

FOR GENERAL MANAGER, SECRETARY AND TREASURER—Thomas G. Newman, 211; blank 1.

NOMINATIONS.

It was suggested by some members that nominations for Officers should be made in the bee-periodicals. I presume this will be attended to by those who expressed the desire—my province not being to nominate, but to record the votes.

UNFINISHED BUSINESS.

The cases now in hand and unfinished, will be pushed as fast as the Courts will allow. It would not be wise to discuss them here, before trial, but the results will be made public as soon as possible after decision.

THE UNION STILL PROSPEROUS.

While the recent poor seasons for honey have prevented many members from paying their dues, the National Bee-Keepers' Union still holds its honored place among prosperous American Institutions which have been organized for the purpose of benefitting mankind. In addition to this state of things in the apicultural world, we have been passing

through a period of financial depression almost unequaled within the memory of this generation. Every pursuit and industry have suffered in the general calamity, and it is a matter of congratulation that the National Bee-Keepers' Union presents such a gratifying Report.

We may be comforted, however, at least partially, by the thought that in these unprofitable years for the industry, the jealousies of envious neighbors are also being in a measure destroyed, for but few have the hardihood to "jump upon a man when he is down." It is the years of prosperity which develop the envious combativeness of ignorant and selfish persons, and these soon find some excuse for persecuting their prosperous neighbors.

FINANCIAL STATEMENT.

Balance, as per last Report.....	$721.71
Fees from 311 members for 1894.	311.00
	1,032.71
Expenses for the year	254.20
Balance, Dec. 16, 1894.....	$778.51
Donation, L. M. B.....	5.00
Total balance on hand	$783.51

The Union has engaged attorneys for the defense of several cases, the cost for which will have to be paid later.

Donations and Legacies are always acceptable, and the one reported above was made to induce others to follow suit, though the donor requested his name to be withheld, as he did not desire notoriety. He added: "My home market has been flooded with syrup in honey-jars, and I feel the necessity of just what the Union can do to remedy acts of this kind."

DUES AND ELECTION OF OFFICERS.

It now becomes my duty to call for $1.00 for the coming year, as dues from each member. A Blank is enclosed to be used for sending it, and also a Voting Blank. Fill up all the blanks, and send to the Manager with a bank draft or money-order for $1, in the envelope sent with it. It must be received by Feb. 1, 1895, or the vote will be lost.

When voting, care should, of course, be taken to put into office its best and most reliable members, (a good selection can be made from the list of names sent with this Report, and such only are eligible.)

As long as my services are desired and I am able to devote them, the Union will have my best energies.

WORDS OF ENCOURAGEMENT.

The times of unprofitableness will soon pass away. Two years of partial failure of the honey crop are generally succeeded by one or more of great prosperity and plentifulness. We must all take courage and pursue our vocation, working arduously to accomplish success; and with our eyes steadily fixed on prosperity, bend every energy to thus accomplish it.

With "Success" inscribed upon its proud banner, the National Bee-Keepers' Union invites all to continue their membership, and asks others to join this invincible and victorious army.

"Fill up the Ranks!"
The Union is calling—
Don't question the "why"—
Watch others enrolling
To answer the "cry."
Your place is waiting, has waited long—
And waiting for you is this glorious song—
March on! is the cry,
March on! do or die,
Close in, men! close in!
And "Fill up the Ranks!"

"Fill up the Ranks!"
The Union is calling
Whoever is leal.
All around are falling
Brave men true as steel.
Answer now: Ready! ye men young and strong,
In music that's ever the same stirring song.
March on! is the cry,
March on! do or die,
Close in, men! close in!
And "Fill up the Ranks!"

THOS. G. NEWMAN,
General Manager.

At the convention, on motion, Mr. Newman, as General Manager of the National Bee-Keepers' Union, was requested to furnish a Report of the Union's work, so that it might be published in connection with the convention proceedings. He has kindly complied with the request, by getting up the foregoing interesting annual Report.

(To be continued.)

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

What Caused the Alfalfa Failure?

Will some reader of the American Bee Journal please give the probable cause of the failure of a crop of Alfalfa here? It was sown in the fall on a soil mixed with sand and clay, and made a fine growth, and was cut the next spring in April, again in May, and again in June. The third cutting killed it. Was it the cutting so often, or some condition of climate or soil? W. BOWSER.

Enterprise, Miss., Dec. 6.

Report for the Season.

I have 7 colonies, and got about 200 pounds of honey this fall—half comb and half extracted. I like the American Bee Journal very much.

MICHAEL LARINAN.

Moline, Ill., Dec. 6.

What I "Learned" in 1894.

That the best plan to have pure honey in the market is to produce comb honey only, and throw away the villainous extractor that sucks out the young bees and grub-gravy along with the nectar, and robs the brood-chamber, and sometimes leads the honest bee-man into the *sin* of selling unripe honey, doctored with glucose, half and half, and in this way doubling the receipts of bee-keeping.

That the man who keeps a bee-supply shop, and the woman that rears honey queens at $10.00 a head, are the people that get the golden eggs, and the bee-man who buys those traps and hot-house queens, is the goose that lays the eggs.

That the black bee is not subject to the new dago disease—paralysis; which is probably caused by in-breeding and too much coddling and petting and fussing, causing microbes in the blood, and heart failure. What we now need is a microbe extractor. Some bee-men already have the eye-opener, and many others have the money-purse extractor, which works beautifully, and leaves nothing to be desired in that direction.

That it does not hurt a queen to ride in the mail-bag—it is the sudden stop that shakes her up. At this station the mail-bags are thrown from the train when moving a mile a minute; they fly like a cannon-shot, and roll and bound around for rods, until they bring up against a fence or post, making the gravel fly as if a comet had suddenly lit near the rail-track. Of course it can't injure a five or six banded queen to alight in that way—the more hoops or bands, the less danger of bursting up.

Dearborn, Mich. C. W. LEARNED.

In Good Condition for Winter.

We did not average 5 pounds of honey to the colony here this year, but the bees are in good condition for winter.

P. B. HILL.

Mt. Vernon, Ohio, Dec. 3.

Experience with Bees.

I have at present 10 colonies of bees. I secured about 100 pounds of comb honey this year, but no extracted honey, and no swarms. I keep my bees on the summer stands the year round. I now have them packed with cornfodder, and have had good results in wintering that way. I bought 3 colonies this fall, at $2 apiece. My bees are blacks.

I sold 16 pounds of honey for 12½ cents per pound to the neighbors, and took 14 pounds to town and got 14 cents a pound for it. Honey does not sell well here. My bees are in good condition for winter. W. M. DANIELS.

Perrysburg, Ohio, Nov. 30.

Experience with Bees in Mississippi.

I see a good many are giving their reports of the honey crop, but none from this State. As I am a small bee-keeper, I will try to tell what we have done here the last two years. The past season has been a bad one for us—the worst for 20 years, so Dr. Blanton, of Greenville, says.

Last February and March it was very warm; trees bloomed and the bees began to gather honey, and filled the hives full of bees and brood. About March 18 it turned cold, and on the nights of the 20th and 21st it froze, and killed all

flowers, leaves and many apple, pear and peach trees, and before there were any more flowers many colonies perished, and what pulled through were very weak. Then the dry weather set in, and continued nearly all summer, and what little honey we did get was fall honey.

I will give our crop for the past two years:

Beulah apiary, from 120 colonies, in 1893, 9,000 pounds of honey; 130 colonies in 1894 –3,500 pounds.

Gentry apiary, 115 colonies in 1893—8,400 pounds; 133 colonies in 1894—4,429 pounds.

Wrights apiary, 63 colonies in 1893—7,200 pounds; in 1894—2,900 pounds.

Riverton apiary, 87 colonies in 1894—2,224 pounds.

Niles apiary, 109 colonies in 1894—1,200 pounds.

Home apiary, 41 colonies in 1893—2,224 pounds; 54 colonies in 1894—nothing to speak of, as I keep this apiary mostly for queen-breeding.

I am keeping almost all kinds of bees. I like the Golden Italian for beauty, the 3-banded for gentleness, and the blacks for comb honey. But give me a direct cross between the 5-banded or 3-banded, and I will get the honey.

All of my bees have gone into winter quarters, with plenty of honey to pull through until next May.

I have tested the 10 and 8 frame hives, side by side, and honestly believe I can get 20 per cent. more from the 10-frame hives.

I shall give them another trial the coming season, also the different kinds of bees—blacks, 3-banded, Golden Italian, Carniolan and hybrid—and weigh the honey each time I extract, and report through the American Bee Journal.

The American Bee Journal came to me like a lost friend, as I used to be a subscriber for it about 10 years ago, when I was in the bee-business in Michigan. J. H. SIPLES.

Wrights, Miss., Nov. 29.

Moved from Kansas to Texas.

We have changed our home from Jewell City, Kansas, to Webster, Harris Co., Texas, and saw Mrs. Jennie Atchley and family on Nov. 23. We had a pleasant visit with them. It was too dry in that part of the country; bees did not do as well as they could have done if they had had more rain.

This is a beautiful county, surrounded by good timber, and a beautiful lake (called "Clear Lake") and Clear Creek, and is not quite as level as some of the coast country. It has better drainage. It was rather wet here the past summer—more so than it has been for 20 years, so the old settlers say. Bees did not do as well this year as they did last. I see no reason why this should not make one of the best bee-countries, as there are blossoms all the year round. We have had roses in bloom ever since we have been here, and people are going to sow alfalfa. There is no doubt but it will be grown easily, as this is a country not subject to drouth. MRS. L. P. SMITH.

Webster, Tex., Dec. 5.

Eight Numbers for 10 Cents.—Yes, we will send the last eight numbers of the American Bee Journal for 1894, to any *new* name, for only 10 cents (stamps or silver). Now, here's a good chance to get some of your bee-keeping friends started in taking the Bee Journal regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have *three* bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the *last eight numbers of 1894*—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 797 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*

Old Bee Journals.—We have quite a number of old copies of the American Bee Journal, extending back perhaps 10 years. We will send these out at *one cent a copy*, all to be different dates, and back of Jan. 1, 1894. Remember they are *odd* numbers, and you must let us select them. We cannot furnish them in regular order, that is, one or two months' numbers without a break, but will mail you as many single or odd copies as you may wish, upon receipt of the number of cents you want to invest in them. They will be fine reading for the long winter evenings, and many a single copy is worth a whole years' subscription. Better send for ten or more copies, as a sample order. Only a cent a copy, *back* of Jan. 1, 1894.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Oolo.

NEW YORK.—The annual meetiug of the Ontario Co., N Y., Bee-Keepers' Association will be held in Canandaigua, N. Y., Jan. 25 and 26, 1895. Come early. Everyone come.
Bellona, N. Y. RUTH E. TAYLOR, Sec.

ONTARIO, CANADA.—The annual meeting of the Ontario Bee-Keepers' Association will be held at Stratford, Jan. 22, 23 and 24, 1895. All bee-keepers are cordially invited to attend. W. COUSE, Sec.
Streetsville, Ont.

PENNSYLVANIA,—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

MICHIGAN.—The Michigan State Bee-Keepers' Association will hold its annual meeting Wednesday and Thursday, Jan. 2 and 3, 1895, in the city of Detroit, at the Perkins Hotel, cor. of Cass and Grand River Avenues. Rates, $1.25 and $1.50 per day. The former rate if two occupy one room. This will be at a time when railroad rates will probably be one-half fare. W. Z. HUTCHINSON, Sec.
Flint, Mich.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1½ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.
Indianapolis, Ind.

IOWA. — The Eastern Iowa Bee-Keepers' Association will hold their annual meeting at Anamosa, in the court room, on Dec. 26 and 27. There will be reduced rates on all railroads at this time. This will give all a good chance to attend the bee-meeting, and an opportunity to look through the State prison, which is located at Anamosa. Let all the bee-keepers within reach take advantage of this grand opportunity. Come with the intention of having a grand, good time. Let each bring with them some fixture or fixtures that he or she thinks of value in the apiary, and some important question for discussion.
Welton, Iowa. FRANK COVERDALE, Sec

Read our great offer on page 771.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & CO., 128 Franklin St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 423 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & CO., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

The Amateur Bee-Keeper is the name of a neat 64-page pamphlet, 4x7 inches in size. It is written by that practical Missouri bee-keeper, Mr. J. W. Rouse, and published by the Leahy Mfg. Co. It should be read by every bee-keeper, whether an amateur or not. A new and second edition has just been issued, the first 1,000 copies being disposed of in only two years. It is nicely and fully illustrated. Price, postpaid, 25 cents; or clubbed with the American Bee Journal for a year—both, $1.15.

Take a Sleigh-Ride as soon as the snow falls in sufficient quantity. See the buggy-sleigh offered on page 765 in connection with a year's subscription to the American Bee Journal. We don't know of a cheaper sleigh, and equally good. It is certainly a handy affair. The "beautiful snow" will soon be here—better get ready to "take a good slide!"

Two Bound Volumes of the American Bee Journal for 1891 we have for sale, by express, for $2.00, or by mail for $2.30. They are bound in good board covers with leather backs, gilt-lettered. The first one who sends the price, will have the books.

Have You Read the wonderful Premium offers on page 797?

Honey & Beeswax Market Quotations.

CHICAGO, ILL., Dec. 7.—The trade is taking some comb honey for holiday display. This helps out all the choice lots, which bring 15c. per pound; other grades that are good to choice, 13@14c. The dark grades as usual are slow of sale at 9@10c. Extracted sells chiefly at 6@6½@7c. Very little basswood or clover is offered in 60-lb. tins, two in a case. Such meet with ready sale at top prices.
Beeswax scarce at 28c. R. A. B. & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are not quite as salable; and 2-pound sections are little called for. We quote as follows: 1-pound fancy clover, 13@14c.; 2-pound, 12½@13c.; 1-pound white, 12@12½c.; 2-pound, 12c.; 1-pound fair, 10@11c.; 2-pound, 10@11c.; 1-pound buckwheat, 10@11c.; 2-pound, 9@10c. Extracted, clover and basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 50@60c. per gallon. Beeswax, scarce and in good demand at 29@30c. C. I. & B.

CINCINNATI, O., Dec 8.—There is no change in the market. Demand is good for all kinds in a quiet way. No change in prices. Extracted honey brings 4@7c. Best white comb, 14@16c.
Beeswax is in good demand at 22@27c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, MO., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat. 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6½c.; buckwheat, 5½@6c. Beeswax, 27@29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

KANSAS CITY, MO., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.: dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Nov. 24.—The receipts of comb honey have been very large and exceed those of former years by far. The demand has not been very active of late and there are no signs of improvement. The supply is accumulating and the prices show a downward tendency. We quote: Fancy white, 1-lbs., 13@14c.; fair white, 11@12c.; buckwheat, 10c. Two-pound sections are in very light demand and sell at from 1@2c. a pound less. The market on extracted is quiet, with plenty of supply of all kinds. We quote: White clover and basswood, 6c.; Southern, 50@55c. per gal. Beeswax is firm and in good demand at 30@31c. H. B. & S.

CHICAGO, ILL., Nov. 27.—Up to the present the sales on honey have met with our expectations. We have received considerably more honey than we figured on handling, owing to the short crop report, and we think the early shippers reaped the benefit. However, we are now getting the average price, viz.: Fancy, 15c.; white, No. 1, 14@13c. Extracted, 6@7c.
Beeswax, 28@29c. J. A. L.

Profitable Bee-Keeping, by Mrs Atchley, will continue for some time in her department of the BEE JOURNAL, possibly each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay $1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for $1.40.

RUDY'S PILE SUPPOSITORY

Is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and free Sample to MARTIN RUDY, Registered Pharmacist, Lancaster, Pa. No POSTALS ANSWERED. For sale by all first-class druggists everywhere. Peter Van Schaack & Sons, Robt. Stevenson & Co., Morrison, Plummer & Co., and Lord, Owen & Co., Wholesale Agents, Chicago, Ills.
Pease mention the Bee Journal. Nov15

Wants or Exchanges.

This department is only for your "Wants" or bona-fide "Exchanges," and such will be inserted here **at 10 cents a line** for each time, when specially ordered into this department. Exchanges for cash or for price-lists, or notices offering articles for sale, will not be inserted here—such belong in the regular advertising columns, at regular rates.

WANTED—Single man, with good experience, to take charge of the La. Bee-Keepers' Supply Manufactory. Must also understand the care of bees. Having met with a sudden accident, I am compelled to have an experienced man to take charge of my business at once.
LOUIS V. ESNEAULT,
Box 54, Donaldsonville, La.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

Weekly, $1 a Year. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Sample Copy Free.

VOL. XXXIV. CHICAGO, ILL., DEC. 27, 1894. NO. 26.

"A Happy New Year" to you all—
With cheerfulness and health.
"A Happy New Year" may it be,
Midst poverty or wealth.

No Convention Copy was received in time for this number of the Bee Journal, consequently none of the report of the North American will be found in it this week. We had hoped to complete the report before the Toronto meeting, in 1895, but, like some other things in Washington, D. C., 'tis inexcusably slow-moving.

The Index to Volume XXXIV will be found in this number. It is what might be called "a recapitulation" of the 26 issues of the American Bee Journal since July 1, 1894. We hope the majority of our readers have preserved the copies from week to week, so that now, with the aid of the index, they will be able to refer with ease to any particular and important topic they may desire to re-read. It may be that some matters during the hurry of summer-time were overlooked. The index will remind you of any such. Look it over—then bind it in with the preceding 25 numbers, and you will have a valuable volume of the latest bee-literature.

Another Volume of the American Bee Journal is completed with this number. Its 35th year will commence next week. We hope that 1895 will be the best year the old American Bee Journal ever had. We believe that in its special bee-information and general reading on the subject of bee-culture, the next volume will far exceed that of any previous volume. It shall be our constant aim and endeavor to improve its contents from week to week. We desire ever and always to give more than "value received"—to give two dollars' worth of bee-reading for one dollar. We believe in "scripture measure"—pressed down, heaping up, and running over. Our efforts will surely be rewarded, for bee-keepers, as a rule, are a generous, fair, and square class of people. And they "know a good thing when they see it." We'll try to see that they "see a good thing" in the old American Bee Journal every week.

Experiment Apiary Reports.—On page 814 of this number of the American Bee Journal, will be found some "boiled down" reports of experiments made by Hon. R. L. Taylor, of the Michigan Experiment Apiary. The "boiling down" process was done, as will be seen, by Rev. W. F. Clarke, who, for the time being, acted as "cook." It required a deal of work to thus condense the several long reports, and will no doubt be appreciated by all.

Another Bee-Paralysis Cure.—In the November Bee-Keepers' Review, W. A. Webster, of Bakersfield, Calif., gives another remedy for bee-paralysis. He says it was given to him by one of his corres-

pondents, and that it was discovered by scientists in Denmark. By its use Mr. W. has never failed to cure when the work was thoroughly done. Here is the method used:

Take as follows: One teaspoonful salicylic acid and one teaspoonful powdered borax, mix thoroughly and dissolve in a small quantity of water; add this to sufficient sweetened water to make one quart of liquid, and spray over the bees and combs. Repeat once daily until the bees quit dying, which is generally about the third or fourth day at the outside. Occasionally it may be necessary to repeat some weeks later, but generally one series of treatment is sufficient.

During two successive seasons I have held things in check, while the disease has become epidemic with my neighbors. I believe it contagious in a certain degree, but if watched and taken by the forelock, none need fear its ravages.

Mr. Geo. W. Brodbeck, of Los Angeles, Calif., in a letter dated Dec. 12, says: "We have just had the first rain of any consequence, and every one wears a smile." That's a good thing for California bee-keepers, as so much there depends upon abundant rains—especially as to getting a honey crop the following season. We hope they may be well supplied with rains now, and later on have plenty of honey again.

A Little Too High—even for the famous Canadian honey, it seems the reporter got it. Here's the correction from Mr. Holtermann himself:

FRIEND YORK:—On page 756 of your excellent report of the North American Bee-Keepers' convention, I see I am reported as saying: "We in Canada have wholesale 12½ cents and retail 15 cents for extracted, and these are the prices we get." I did not intend to say that, if I did. I may have said *as high as* 12½ *cents.* That is certainly much above the average price for extracted honey. R. F. HOLTERMANN.

The Editorial "I" and "We" seem to be giving some people lots of worry these days. Now, here comes our friend Emm Dee, who puts the case in this style:

BIG "I" AND LITTLE "WE."

Come to think of it, I too must take exception to the American Bee Journal editor, regarding his conclusion concerning the editorial "we" and the individual "I"—and the more concur with Bro. Ernest Root's preference. Why? Well, I'll tell you. The "I" gives all statements a more decided, independent and responsible force; it admits of no equivocation; it courts no excuse; it holds itself personally amenable for the utterance; it practically affirms that he is the writer—"If you have any objections to urge, I am ready to afford you satisfaction!"

Now, it is not so with the usual "we." Not only does it fail to be commendably modest, but it lacks individuality and manly grit! It nebulously suggests that others are implicated in the assertions made; it is only another way of expressing the irresponsible "they say," which phrase may or may not include half the inhabitants of a given place—a weak, cowardly intimation, too frequently protected. Of all things to me most admirable is the exhibition of manly courage of one's convictions, of placing one's self firmly, honestly and independently before the public, ready to maintain the principles he believes to be right; courting criticism from soever source, and I know of no more unflinching vowel for the purpose than a respectful "I."

EMM DEE.

With all due respect to those who seem to disagree with the editor of the American Bee Journal on this subject, it is a matter scarcely worth discussing. There are other interests more pressing, and of more consequence to bee-keepers, than whether "I" or "we" should or should not be used by an individual editor. While a discussion of the subject might be entertaining, it would hardly prove to be very profitable.

Dr. A. B. Mason and Wife, of Toledo, O., have both been sick for some time, we regret to learn. From a letter dated Dec. 14, we clip these closing words:

Mrs. Mason has been an invalid since last June, but is *very* slowly getting to be her "old self" again. I guess we will both attend the Michigan Bee-Keepers' convention at Detroit, for a change. It was a year ago yesterday that I had the second attack of "grip," and I don't seem to get over its effects; no energy, and "don't care for nothin'." As ever, your friend,

A. B. MASON.

P. S.—Dec. 8, the thermometer showed 60 degrees, and I set some of our bees out of the cellar to see them fly; and a colony I looked over had four combs with hatching brood, eggs and larvæ, and was in good condition. Will it spring dwindle? We'll see. A. B. M.

The Micigan State convention referred to by Dr. M., meets in Detroit on Jan. 2 and 3. Everybody who can do so, should go, and help make it the best meeting our Michigan friends ever held. But they always have good meetings. They are noted for that.

☞ **See A B C** offer on page 803.

Golden-Rod Honey.—Mr. W. H. Morse, of Florence, Nebr., has kindly sent us a bottle of golden-rod honey—the first, we believe, we ever saw. He says this about it:

FRIEND YORK:—I have mailed to you today a small quantity of honey which I thought would be of interest to you, as I am sure it is exclusively golden-rod, it being taken from a colony which had no surplus until the above-named flower opened, and I watched closely until I took the honey off. I could with difficulty extract it. In the same room where it was kept, I have a small bottle four years old, which never showed signs of candying, and the sample I send was showing signs of candying in three days after extracting, but the weather was so dry that the nectar had very little water in it.

I wish you every success with the "Old Reliable," which I regard as a pet, and would not like to miss its weekly visits.

Yours truly, W. H. MORSE.
Florence, Neb., Dec. 12.

The sample is candied solid, and is nearly as white as candied basswood honey. The flavor is quite mild, resembling slightly that of heart's-ease, we think. We shall be glad to give our bee-keeping friends a taste of it when they call at our office.

Bee-Keepers' Educational Society.—In the Providence, R. I., Evening Bulletin was printed the following paragraph on Dec. 11:

Last evening, in response to invitations, some 16 bee-keepers were at the office of William A. Greene, 21 Custom House street, where steps were taken to form an association for mutual improvement in the art of bee-culture. It was voted to give the name of "The Bee-Keepers' Educational Society" to the association. Thomas M. Pierce, of Wickford, was elected President, and Walter G. Gartside, of Providence, Secretary and Treasurer. A committee of four, W. A. Greene, Dr. Mackey, S. Lewis and J. Parker, was appointed to draw up a constitution and by-laws. The meeting adjourned to Friday evening, Dec. 21, when it is hoped that many more will be present to listen to interesting essays on the subject of bees.

Mr. W. G. Gartside sent the foregoing with the following letter:

MR. EDITOR:—From the attached clipping you will perceive that interest in bee-keeping is progressing even in the little State of Rhode Island.

I once heard a story of a conversation between a gentleman and Dr. Miller, at the Columbian Exposition. The Doctor asked the other, who appeared interested in the bee-exhibit, if he kept bees. The answer was that he kept a few colonies, and came from a State where there were six bee-keepers, and all the territory was taken up. The Doctor at once said, "Rhode Island?"

I am pleased to be able to inform that gentleman and the Doctor, that there are now more than six—in fact, nearly fifty who keep from one to four colonies, and, *some territory* still open for others.

Now, while some Rhode Island bee-keepers did not obtain more honey than Dr. Miller did this year, there were several that did obtain from 300 to 800 pounds of A No. 1 honey, part comb and part extracted; and from the general tone of conversation and correspondence, I think that there is interest enough to keep this new society in a flourishing condition, with increasing membership at its each monthly meeting.

Yours truly,
W. G. GARTSIDE.

We hope to hear often from the Bee-Keepers' Educational Society, through its Secretary, Mr. Gartside. Possibly we may be permitted to record in these columns some of their monthly "sayings" and "doings." Surely, all our readers will be interested in anything that comes from a society having such a happy and wise name.

Pomona College, at Claremont, Calif., is where Prof. Cook is teaching. We received a catalogue of that school a short time ago, and in it we find this, under "Entomology"—Prof. Cook's department:

The science and practice of bee-keeping also receive attention, if any of the students desire instruction in this study. The races of bees are discussed, and the students, by actual practice, are made familiar with the various manipulations of the apiary.

Then on another page occur these words under "General Regulations" of the college:

Such obvious requirements as abstinence from intoxicating drinks and vulgar and profane language are understood. To secure the best results, it has been deemed wise to forbid card-playing and the use of tobacco.

Guess Prof. Cook must be in pretty good school—a safe place for parents to educate their boys and girls. We are glad to speak of it in these columns.

Regular Advertising is a subject which Editor Root touches on in "Gleanings" for Nov. 15. Here are his truthful words:

There has been a good deal written in regard to advertising, but I thing there is one point which has not as yet been fully emphasized; viz.: that the advertiser must

not be disappointed, nor blame any one, if he gets no return from one insertion of an advertisement, especially if he is a new man. We will say that Mr. A, for instance, orders one insertion of an advertisement, offering queens. He is a new man, and is apt to expect that, within four or five days after the appearance of his card, he will get a large number of responses; but he forgets that Mr. B, a well-known queen-breeder, offers queens just as cheap, just as good, and is *known* to be reliable. It is the most natural thing in the world for bee-keepers to buy of those who are well known. I do not mean to discourage one-insertion advertisements, but usually they do not pay unless some special inducement is offered in the way of extra quality, extra low price, or something novel, that everybody wants to see and get. But even then a plurality of insertions is far more liable to get better returns for the money invested.

While the above is exactly right, we want to say that *continuous* advertising pays best. If you cannot afford to keep an advertisement of a one inch, or two inch, space running constantly, then use only a half inch space. It will pay any advertiser to keep his name, address and business before the public *all the time.* If he permits his advertisement to drop out of the bee-papers, he will find that his name will be dropped from the memory of those who would be his customers if they were reminded of him by seeing his advertisement in every issue of the bee-paper taken.

These are matters worth thinking about, if the advertiser wishes to build up a good business.

Marketing Honey.—Mr. L. L. Alspaugh, at the last Nebraska State convention, read an essay on "Extracted or Comb Honey for the Home Market." In the November Nebraska Bee-Keeper we find it as follows:

My plan has been like this. I made two show-cases, taking one of them to each of our best grocery stores, and set them on the counter and filled them with nice honey, taking care to have the sections nicely cleaned and scraped, and honey well capped over, adorning them with pretty three-colored labels, giving kind of honey, and my own name and address, giving the grocer orders to sell the honey at so much per section.

The great secret in selling honey at home or abroad, depends largely upon the shape and style in which it is put on the market. People do not care to buy sections of honey where the cappings are dark and broken; with combs bulged out on one side, and thin on the other, with bee-glue all over the sections, but will sooner take one with nice, even combs, with the cappings all white and even, and with the sections scraped clean and adorned with a neat, tasty label; then if the flavor is good, a customer once, a customer always. He pays for his honey, and goes on his way, with visions of "buckheat and honey" for family breakfast.

The business of putting up honey for market, either comb or extracted, is as much of a knack as it is for the farmer to have hogs that bring the highest price in market. The good housewife who takes poor, soft, colorless buttter to market, which the grocer only buys for soap-grease, never gets the highest price for her butter, but has to accept just what she can get; but when she takes a good, prime article, her butter is demanded from a class of customers who can and will pay for a good article.

CONVENTION DIRECTORY.

Time and place of meeting.

1895.

Jan. 2. 3.—Michigan State, at Detroit, Mich. W. Z. Hutchinson, Sec., Flint, Mich.

Jan. 9.—Indiana State, at Indianapolis, Ind. Walter S. Pouder, Pres., Indianapolis, Ind.

Jan. 21, 22 —Colorada State, at Denver, Colo. H. Knight, Sec., Littleton, Colo.

Jan. 22-24.—Ontario, at Stratford, Ont. W. Couse, Sec., Streetville, Ont.

Jan. 25, 26.—Ontario Co., at Canandaigua. Ruth E. Taylor, Sec., Bellona, N. Y.

Jan. 28.—Venango Co., at Franklin, Pa. C. S. Pizer, Sec., Franklin, Pa.

Jan. 30, 31.—Vermont, at Middlebury, Vt. H. W. Scott, Sec., Barre, Vt.

Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.

Mar. 16.—S. E. Kansas, at Bronson, Kan. J. C. Balch, Sec., Bronson, Kan.

——. ——.—North American, at Toronto, Can. Frank Benton, Sec., U. S. Dept. Agriculture, Washington, D. C.

☞ **In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—The Editor.**

North American Bee-Keepers' Association

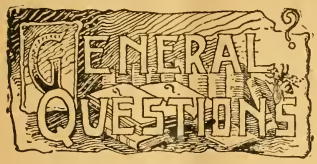
OFFICERS FOR 1895.

PRES.—R. F. Holtermann.....Brantford, Ont.
VICE-PRES.—L. D. Stilson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson...Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill. 147 South Western Avenue.

Have You Read page 830 **yet ?**



ANSWERED BY

DR. C. C. MILLER,

MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Italianizing an Apiary Cheaply.

I am starting with 22 colonies of black and mixed bees, bought from farmers near. I wish to Italianize all of them as soon as I can, without the expense of buying queens for all of them. Could I practically start with one Italian queen and rear queens myself for the entire lot? What troubles me is the drones. If I shut up all but my one colony of Italian drones, the chances are small for the queen finding a drone among 21 colonies of bees with only one colony of drones flying. And while I am keeping drones up in 21 colonies, there may be some queens in the same colonies wanting to fly out to mate. What per cent. of drones could be trapped and killed without damage to the apiary? By trapping all the drones from the new colony, the queen could be allowed to fly and mate with Italian drones.

Russellville, Mo. L. G. C.

ANSWER.—Yes, get one good queen, then rear queens for the rest. Of course it will take a longer time than to buy queens for each one, but it will cost less. There is no trouble about drones enough. One colony can rear drones enough for a large apiary. But it will be better to have two Italian queens, rearing young queens from one of them, and letting the other have plenty of drone-comb, so as to rear a good lot of drones. Not that such a large lot of drones is necessary, but the more Italian drones you have, the better your chance of pure fecundation, with black bees around you.

There is nothing to hinder your trapping all the drones in all the hives except the one that you want to rear drones in. But I would take preventive measures. Cut out all the drone-comb in each hive except one or two inches square. Put in patches of worker-comb in place of the drone-comb you cut out. Then take Doolittle's plan, and every two or three weeks shave the heads of the sealed drone-brood in the drone-comb you have left. If you are thorough in this, there ought to be very few drones to trap.

Changed from Blacks to Hybrids.

Will you please explain the following: I purchased three colonies of as black bees as one often sees, about two years ago, and the same summer I found a cluster of hybrids in the woods and brought them into my yard also; and now my bees are all the same color as the hybrids, and much gentler. How this change with the advantage so much in favor of the black bees? A. H. W.

Walnut Springs, Tex.

ANSWER.—Ordinarily I should have expected the bees to have worked toward the black blood, but should say that you have been peculiarly fortunate in that the queens of your black colonies, as they were renewed, met Italian or hybrid drones. The fact that you found hybrids in the woods indicates that hybrids or pure Italians are near you, and your queens may have met drones from these outsiders.

Using Queen-Excluders.

Is it necessary in all cases to use a queen-excluding honey-board between the brood-nest and extracting case? And is a wood-zinc board the thing to use? J. C. L.

Brooklyn, Pa.

ANSWER.—In running for comb honey I do not find a queen-excluder necessary, and while it may not be absolutely necessary in running for extracted, still I should prefer to have excluders. If you have no excluder the queen is pretty sure to go into the surplus story, and I'd

rather have no brood in the extracting-combs, both for the sake of the brood and the honey.

A Late-Reared Queen.

About a month ago I discovered one of my colonies broodless. I found the queen in a very shrunken condition. To keep up its strength I gave brood from other colonies. On Dec. 1, to my surprise, I found about six queen-cells started from eggs given to them a week previous. I again found the queen, but so shrivelled was her condition that she seemed little larger than a worker. I concluded that she had spent her strength, so I destroyed her, and also all the queen-cells but one. Of course there are no drones at this season—what will be the result of so late a queen? J. B.

Los Angeles, Calif., Dec. 2.

ANSWER.—I'm not sure that I know. In one of my hives I should consider it all right in November to find no brood and the queen of small size, but in that wonderful State of yours things may be quite different, and as other queens were laying right along, and as queen-cells were started you may have been right in thinking that the queen was "played out." I have some doubt if you did a wise thing in meddling so much. So late, and with no drones, it is hardly likely they thought of swarming, and it might have been well to let them run their machine, for the queen-cell you left may have had the poorest queen in the lot. If the weather is good, it is possible the young queen may be already fecundated, for there may be drones that you know nothing of, and you may find the queen laying all right when next season opens.

Sample Copies of the "American Bee Journal" will be mailed free to all who ask for them. The next three or four months will be just the time for getting new subscribers, and if any of our friends can use sample copies among their bee-keeping neighbors, in order to get them as new subscribers, we will be glad to mail the samples, if the names and addresses are sent to us. Better educated bee-keepers will mean better things for all.

OUR DOCTOR'S HINTS.

BY F. L. PEIRO, M. D.

McVicker's Building, CHICAGO, ILL.

"Kidney Trouble."

Yes, this is the term applied to most ailments affecting the small of the back, including weakness and lameness. Well, in a sense, this is reasonable enough, too, because we all know that this is the seat where the kidneys are located. And, then, if with this sore-aching exists trouble in voiding urine, whether it be scantiness of the liquid, or pain on passing it, or if it be very red in color, or is attended with a brick-dust deposit; or if cloudy, stringy and offensive, why, all these facts tend strongly to confirm our conviction that we are, indeed, victims of "kidney trouble," though not knowing exactly what special form, but always fearing the worst.

Well, now let us reason together. Serious kidney difficulty is comparatively rare. It far more often is the result of catarrhal or gastric trouble than from any other cause. Doctors term this "functional derangement," which, put in plain language, implies that it is not dangerous in character, and that treatment should be directed to the causes producing disturbance of these organs rather than remedies for the kidneys direct. It is like a cinder in the eye—it is not the eye that needs removal, but the cinder. And no worse practice can be followed than the taking some, or all, of the so-called "kidney cures" vaunted for this specific trouble.

Most likely the stomach needs correcting, or it may be a slight rheumatism of the lower muscles of the spine that require a little medical attention; or, more likely still, it may be that some of our unreasonable practices need attention, whether of diet, of improper habits, or causes you can easily ascertain by consulting your personal self. Perhaps the *particular* evidence that tends most strongly to assure the mind of the sufferer that his conclusions of kidney trouble is correct, is the pain or straining or other difficulty he may experience in passing water. But then, the facts are that in far the greater number of such conditions are due to an irritable *bladder*—a great difference from impair-

ment of the kidneys, both as to consequences and proper treatment.

Troubles of the bladder are far more frequent and more easily remedied. Diseases of the kidneys are greater in number, serious in form, and vastly more difficult to cure. How are they produced, do I hear you ask? Well, some acute diseases to which we are subject are responsible for a certain share—scarlet fever, typhoid fever, diphtheria, measles, etc. Then, too, habits of intemperance aee one of the greatest and most certain causes of most serious forms of kidney trouble. The indiscriminate use of certain remedies—turpentine and kindred drugs—are other plausible factors. And, finally, disease of these organs may be due to indirect causes which we cannot here consider.

Sufficient has been hinted to show the uselessness of worrying over imaginary ills, and the manner in which it may be occasioned and avoided. There is only one *certain* way of determining the absolute facts: It is to have the urine chemically and microscopically examined. This method places the nature of the case beyond the peradventure of a doubt. And the satisfaction of this knowledge, and, incidentally, the suggestion of correct procedure to a cure, is worth all the examination costs.

Those New Subscribers, that you have long been thinking of getting, are very likely ready now to give you their names. You know that we offer to give each one of them a free copy of the 160-page book. "Bees and Honey." Yes, and we will give you a premium for getting the new subscribers, as you will see on page 702. Better at once "get after" those bee-keeping friends of yours, and secure their subscriptions, so you can send it with your own renewal before the end of December. To double the present list of readers of the "American Bee Journal" will mean more than a doubly better paper for all. We can guarantee that. If each subscriber sends only one new name, the thing will be done. Will YOU do it?

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. Prices, postpaid: Single copies, 5 cents; 10 copies, 35 cents; or 100 for $2.00.

Read our great offer on page 832.

CONDUCTED BY

MRS. JENNIE ATCHLEY,

BEEVILLE, TEXAS.

Helpful Words—Cross Hybrids.

MRS. ATCHLEY:—I find a kind word from you quite often in the American Bee Journal, and your department takes my first glance through and through; then I look for whatever I may see. Your part is information to me almost every time. I find in the Nov. 1 number that you speak of bee-keeping in south Texas. I am like Mr. J. H. Berry, of Gale's Creek, Oreg. I need a good job of bee-keeping in that portion of the country, both for my health and profit. Can you answer for me a few questions through the "Old Reliable?"

1. What would be the lowest cost to locate as one of the 20 bee-keepers you spoke of being able to locate in your county?

2, How are the questions asked, that are answered by so many at once, in the American Bee Journal? For instance, we find the following: "What would you do had you bees so cross as to be unmanageble?" I thought the answers, some of them at least to me, quite laughable, though several years ago I had a fight with some hybrids that I was at one time decided to run. But I had never had anything so helpful as the American Bee Journal to read. I made several smokes in front of hives, and soon found that the little, bitter enemies were glad to surrender all they had. Two years afterward I learned that these same bees had whipped out some of the so-called bee-keepers, and run them clear out of the yard. They had heard of me in some way, and sent for me to come and work them over. Now, you would have smiled to have seen me and my wife drive up and face several families waiting the arrival of the old bee-man. "Oh," said they, "he has brought his wife to hold the fort while he runs;" and the laughable part to him was that these poor bee-folks

never saw hybrid bees before. "Just let the old bee-man have his way, and we will have the fun to see them run." But stop; there was no other than by-standers that did the running, while we cut out 16 boxes of fine 4-year-old honey from several hives, and wound up in full possession of house, yard, folks and all.

L. B. WHITTLE.

Cloud's Creek, S. C., Nov. 21.

Friend W., I am very glad indeed that you find my department interesting, and I shall use my best thoughts and words to make it so in the future.

1. In answer to your first question, I will say that I do not know what would be the cost of locating an apiary in this county, but of course it would depend entirely upon how many bees you wished to start with, etc. I should think that you could start with 100 colonies with $500, and less, in proportion to the number of hives. I mean where you would buy everything.

2. The questions are collected by the editor, and about a dozen sent out to each of the several persons answering them, with a blank under each printed question for the answer. Of course no one knows anything about what the answers of the others will be until read, and that makes them interesting.

I am glad you conquered the hybrids.

JENNIE ATCHLEY.

Eight Numbers for 10 Cents.—Yes, we will send the last eight numbers of the American Bee Journal for 1894, to any *new* name, for only 10 cents (stamps or silver). Now, here's a good chance to get some of your bee-keeping friends started in taking the Bee Journal regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have *three* bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the *last eight numbers of 1894*—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 830 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*

Double or Single Walled Hives —Which?

Query 953.—1. Do you prefer single-walled or double-walled hives?

2. Why your preference?—N. Y.

Double-walled hives with chaff filling. —E. FRANCE.

1. Single-walled, in my location.—J. P. H. BROWN.

1. I have never used double-walled hives.—J. M. HAMBAUGH.

1. Single-walled. 2. Cheaper, and more convenient.—A. J. COOK.

1. Single-walled. 2. Because cheaper and much easier handled.—J. A. GREEN.

1. Single-walled. 2. Lighter, and better for cellar wintering.—P. H. ELWOOD.

1. Single-walled. 2. Easier to handle, and costs less. I winter bees in the cellar.—EUGENE SECOR.

1. Single-walled. 2. I consider them better, as well as cheaper, and lighter to handle.—R. L. TAYLOR.

1. I prefer single walls. 2. Because they are just as good, cost less, and are lighter to handle.—B. TAYLOR.

1. Single-walled, every time. 2. Easier to handle in all cases, and for many other reasons.—H. D. CUTTING.

1. Single-walled hives. 2. Because the sun will warm up the interior during warm days.—MRS. L. HARRISON.

1. Single-walled. 2. Cost less, and I don't know of any sufficient advantage in the double-walled.—C. C. MILLER.

1. Double-walled. 2. Because they can be more successfully wintered, and keep cooler in summer.—W. G. LARRABEE.

1. I have no use for a double-walled hive. 2. Because they cost more, and you cannot keep bees warm in that way. —EMERSON T. ABBOTT.

I prefer a single-walled hive and winter cases. A double-walled hive is a poor hive to winter bees in. I have not

made double-walled hives for years—they are out of date. 2. The single-walled hive is easy to manipulate, and saves labor.—G. L. TINKER.

1 and 2. Double-walled hives, or two thicknesses, are best, but *not* chaff hives, which are too long to warm up in the spring.—DADANT & SON.

1. Single-walled. 2. Easier made, keep drier, and the sun will warm them up quickly at a time when the bees need the heat.—S. I. FREEBORN.

1. Single walls, every time. 2. They are cheaper and lighter to handle. If you intend packing bees out-doors for winter, use an outer case.—C. H. DIBBERN.

1. I prefer single-walled hives. 2. Because they are light and easy to handle, and are better in my climate, and a good deal cheaper.—G. W. DEMAREE.

1 and 2. For wintering out-doors, double-walled, because bees winter best in them. For cellar wintering, single-walled, because lighter to handle.—G. M. DOOLITTLE.

1. My preference is slightly towards the double-walled hive. 2. It gives more even temperature the year around. It affords more protection in autumn and winter.—W. M. BARNUM.

1. Single-walls. 2. Because I have found by testing in my own locality, that bees will winter as well in them as in double-walls, and the difference in cost is so great that it takes off lots of profit. —J. E. POND.

1. I prefer single-walled. 2. They are cheaper and lighter to handle, and as for wintering advantages of the double-walled—I should put them in the cellar any way, and the single wall does well there.—JAS. A. STONE.

1. Double-walled. 2. They are warmer in winter and cooler in summer. The combs do not melt down even when the hives stand in the sun, and the bees will not cluster on the outside of the hives so badly.—MRS. J. N. HEATER.

1. There is, I think, some difference in winter, between single and double walled hives, out-of-doors. I have some of the double-walled, and, as a rule, the bees winter a little better in them. But the difference is not great.—M. MAHIN.

1. In this extreme Southern clime I prefer single-walled hives, as they are lighter. 2. Double walls are more expensive, but I have often thought of trying double-walled hives with a dead air space to see if it would not be a protection against heat. I have bees in brick-walled hives that seem very comfortable in hot weather, and a brick hive might be good for a winter hive in cold climates.—MRS. JENNIE ATCHLEY.

Michigan State Bee-Keepers' Convention.

The Michigan State Bee-Keepers' Association will hold its 29th annual meeting Wednesday and Thursday, Jan. 2 and 3, at the Perkins Hotel, corner of Cass and Grand River Avenues, Detroit, Mich. As there will be half-fare going on the 1st, but not on the 2nd, and half-fare returning on the 3rd, it is suggested that as many as possible reach Detroit by the evening of the 1st, and thus have a social time before the beginning of the regular convention work. The program, so far as arranged, is as follows:

FIRST DAY—MORNING SESSION.

10:00 a.m.—Apicultural Work at Experiment Stations—Hon. R. L. Taylor, Lapeer, Mich.

FIRST DAY—AFTERNOON SESSION.

1:30 p.m.—President's Address—M. H. Hunt, Bell Branch, Mich.
3:00 p.m.—Influence of Patents on Improvements—T. F. Bingham, Abronia, Mich.

FIRST DAY—EVENING SESSION.

7:00 p.m.—Marketing of Honey—L. H. Ayers, of the firm of Ayers & Reynolds, commission men, Detroit, Mich.

SECOND DAY—MORNING SESSION.

9:00 a.m.—Non-Swarming Hives—L. A. Aspinwall, Jackson, Mich.
10:30 a.m.—Wintering of Bees—Dr. A. B. Mason, Toledo, Ohio.

SECOND DAY—AFTERNOON SESSION.

1:30 p.m.—Apicultural Literature—James Heddon, Dowagiac, Mich.

Plenty of time has been given for discussion and for the introduction of the question-box. W. Z. HUTCHINSON, *Sec.*
Flint, Mich.

The Novelty Pocket-Knife is worth having. Mr. A. G. Amos, of New York, says this about it: "The 'Novelty' pocket-knife which I received with the AMERICAN BEE JOURNAL arrived all O. K., and it is a dandy." Better get one yourself, and then *you* will know what a "dandy" thing it is. See page 800 for advertising offer.

☞ "I have 60 colonies, but if I had only one I should want the 'Old Reliable'—'American Bee Journal' just the same."—J. W. Stilson, of Wisconsin, Nov. 26, 1894.

MR. R. L. TAYLOR BOILED DOWN.

BY REV. W. F. CLARKE.

I notice that no reports from the Michigan Experimental Apiary have appeared in the American Bee Journal since May 31, 1894. This does not greatly surprise me, for most of what has been published since is so overloaded with figures as to bewilder the ordinary reader. But why should not a brief statement be given of the results arrived at? The publication of the reports in full is rendered less necessary by the appearance of a special bulletin issued by the Michigan State Agricultural College, giving a detailed statement of the experiments for a year. I presume similar bulletins will appear annually. Pending their publication, why not boil down each report as it comes out, and give the essence of it? Suppose I constitute myself cook, and try my hand at this boiling-down process?

SUGAR FOR WINTER STORES.—This is the first of the topics that have been reported on since May 31. In the fall of 1893, Mr. Taylor selected 24 colonies for cellar-wintering, as nearly equal in all respects as possible, one-half of which were to be fed sugar syrup for winter stores, and the other half to be fed with honey for the same purpose. The necessary feeding was done the last of September. The amount of stores consumed was very small, but the important point brought out was the economy of feeding sugar stores instead of honey. The average consumption of sugar was but 3⅛ pounds from the 15th of November until the first days of April, while that of honey was 6⅞ pounds, or nearly twice as much.

SPRING PROTECTION AND STIMULATIVE FEEDING.—This report is very difficult to boil down, being almost all figures, and must have cost a large amount of labor and patience. The results can be given almost in Mr. Taylor's own words. They were a great surprise to him. While he had long been doubtful whether spring packing and stimulative feeding repaid the work and expense, he fully believed there was considerable advantage in them. But he found that in every way in which comparison can be made, the unpacked colonies had the advantage both in increase of strength and in weight. It should be said also that out of 13 two-story hives packed there was a loss of four colonies against none among those not packed, while of the one-story hives the loss among the packed ones was more than twice as great as among the unpacked ones. For stimulative feeding it is to be said that it showed a very trifling advantage in three cases, and was at a disadvantage in a fourth case. The history of these hives, packed and unpacked, fed and unfed, is continued through the season in a subsequent report, which embodies a mass of figures almost as puzzling as logarithms. The season was not favorable, and the continued experi-

ment gave no satisfactory results. Mr. Taylor is inclined to draw some inferences in favor of small brood-chambers, but admits himself that the premises are slender for so doing. But, all through the season, the unpacked colonies maintained their superiority over the packed ones.

FOUNDATION FOR SECTIONS.—The next report is really a continuation of an earlier one in which the superiority of the Given style of foundation had been shown, only the sample of Hunt foundation excelled the Given by 6½ per cent., while the Given excelled the best of all the others by 18 per cent.

FOUL BROOD.—The last report which has come to hand contains a very important experiment designed to ascertain whether the germs of foul brood would retain their vitality when contained in beeswax that had been manufactured into foundation. The late Mr. S. Corneil strenuously took the affirmative of this much-debated question, and Mr. Taylor's experiment, while not positively conclusive, nor absolutely final, affords strong presumptive evidence that Mr. Corneil was right, and that unless care be taken to bring the beeswax at least to the temperature of boiling water, it is possible to convey the germs of that dread disease in comb foundation made from it. Guelph, Ont., Dec. 12.

SUCCESSFUL WINTERING OF BEES.

BY DANIEL WYSS.

I have probably been more successful in wintering my bees than in any other point of the business, never having lost a colony in wintering them, nor from spring dwindling. This winter I may not be as successful, having fed my bees later than I should have done. Out-door wintering, in chaff hives, for this locality, is undoubtedly the safest way. I construct my own hives (and sell none) as follows:

The brood-chamber consists of a box with double walls all around, and double bottoms filled in with wheat chaff; with Simplicity frames, 8 or 10 in number. The space between the walls is about 3 inches. On this is a box, without bottom or top, made of 8 or 10 inch boards, just large enough to slip over the outside walls of the brood-chamber. This box—second story as it may be called—should slip down over the brood-chamber about one inch, and there rest on uprights nailed on the corners. These uprights should extend three or four inches below the bottom of the brood-chamber, answering for legs or supports to the hive. The top, or roof, is made of pine shingles to fit the second story. In this second story any kind of arrangement with sections for surplus honey can be made.

For wintering, out of half-inch lumber I fit a board that will just cover the frames of the brood-chamber. Strips ⅜ inch thick, and about ½ inch wide, are nailed to this board, as near the ends and sides as practicable, giving the bees a free passageway over all the brood-frames. Near the center of this board cut a hole two or three inches square, cover this opening with a piece of board, and pour into this second story enough chaff to cover the board about two inches, well packed. Cover this with a cushion five or six inches thick, made out of burlap filled with wheat chaff.

At any time during a warm day in winter, it will be an easy matter to examine the bees, by taking off the cushion, and work aside the chaff over the board covering the opening in the main board. And should they need feeding, put over this opening a feeder, with syrup or honey, and again cover with chaff and cushion. Even in cold weather bees can be successfully fed in this way.

I have read the American Bee Journal since June, 1886. From its pages I

have learned the most of what little I know about bee-keeping. I like to read it. It admonishes me from week to week to keep an eye on my bees, so that I am less apt to neglect them. Although bee-keeping in this locality is not profitable—at least it has not been with me, the last four or five years—I still want to keep bees. The year just past has been the worst of all for me. The dry season, which commenced very early last summer, dried up the white clover—the only source from which we can expect any surplus in this locality, except it be from fruit-bloom. The drouth continued until near the last of September, thus giving the bees very little chance for laying in their winter stores. I fed a barrel of sugar to 20 colonies. I have but 6 colonies that did not need to be fed.

New Philadelphia, O., Nov. 26.

THE SEASON OF 1894, AND RESULTS.

BY S. B. SMITH.

As I am confined to the house, and some of the time to my bed, with rheumatism, I think it is a good time to write of my success with bees the past season. I also need a little honey to sweeten me while I endure the severe pain to which I am subjected.

We have had a remarkable year. In the spring it was wet, cold and backward. Bees were taken from their winter quarters very early on account of a warm spell, but afterwards we had a cold spell, and a few colonies died. After the cold, wet spell it was very warm and dry for three months, with an average of 85 per cent. of sunshine during the time. Farmers were discouraged, and so were bee-men. But when the season came for gathering in the crops, farmers found that they had been blessed beyond their expectations, and all apiarists say that bees have seldom, if ever, gathered more honey than they have this year.

The season for gathering honey is too short here for bees to gather a large surplus. My old colonies stored from 50 to 60 lbs. to a colony in one-pound sections, besides each sending off one prime swarm. Some of the swarms that issued did not store any surplus honey, and others stored 25 to 30 pounds each.

I have customers that take nearly all the honey I have to sell at 18 and 20 cents per pound, and we do the same with butter. During the summer, butter sells here in the market for 8 and 10 cents per pound, but we have customers in the city that take all we can make at 20 cents per pound.

Our apiary and dairy is run on a small scale, but we take all the profits ourselves. We have no use for the honey and butter middleman.

I put my bees into winter quarters the first day of December, and they had a good flight the day before; if they had been out, they would have had another flight yesterday. All of my colonies are in prime condition, with plenty of honey for a long winter, and they may need it before another honey season, for when we have such mild Novembers and Decembers as we have this year, we are apt to have late springs.

My bees are Italians; they are good honey-gatherers, and I am well satisfied with them, but from what I read in the American Bee Journal I think I would like a colony of Carniolans, but it might prove a poor investment.

I was awarded the 1st and 2nd premiums on honey, and 2nd on butter at our County Fair last fall. We always try to have the best, and always find a good market.

Keeville, Minn., Dec. 8.

HOW TO WATER THE BEES.

BY PHILLIP SMITH.

I want to tell how I water my bees, for the benefit of those who may not know of a better plan.

I take a large cigar-box, or any other box that can be made water-tight either with wax or paint—a tin box made purposely for watering bees might still be better. Make the lid to fit loosely inside of the box; bore the lid full of gimlet holes, nail two liitle strips on the underside of the lid at each end to keep it from warping, and one on top of the lid to lift it in and out with.

While filling the box with water, if the lid gets too heavy, tack thin slices of cork underneath it to keep it on top. The way I got my bees started to water in the boxes, was to take sweetened water at first, very early in the spring of the year, and I was careful to always keep water in the boxes. I generally kept one box with salt water in it—say one tablespoonful to a quart of water. Sometimes the bees seem to be very greedy for the salt water, and at other times they would not touch it for three or four days.

I think I have saved thousands of bees by having this watering-place. It is located on the south side of the house in a cool, shady place, where there is not so much wind as in some places. During the ten hot days in July and August, when the mercury stood at 106°, my bees drank 3½ gallons of fresh water a day out of these boxes. I filled them every morning and noon during those hot days, and spent considerable time watching the bees coming and going for the water. I had 15 colonies at that time, and I have no doubt that some bee-keepers will discredit this statement, for it seems hardly possible, but it is nevertheless true. I measured very particularly, and I know that the boxes did not leak.

I was bothered very much the summer before, with bees in the watering-trough and around the well-bucket where timid folks often did without water on account of the bees being too thick.

This was my third year with bees. I got 150 pounds of honey, and doubled my bees from 9 to 18 colonies. I am very well satisfied with the business, and expect to continue. I have gotten many good things out of the "Old Reliable," and give the above on watering bees, hoping that it may do some one else good.

Williamsburgh, Kans., Dec. 1.

SELECTING A HIVE.

BY CHAS. DADANT.

It is during the winter that bee-keepers should prepare their hives for the coming spring. Now comes the question, Which hive is the best? Of course there is no doubt that the hive must have movable frames, since this hive is acknowledged by everybody as the best, and, in fact, the only one with which all the indispensable operations of the apiary may be performed. But there are several sizes and forms of frames and hives extensively used in this country: the suspended or hanging Langstroth frame, which is the staudard frame of America, the size of which is 17⅝ inches in length by 9¼ in height; the Quinby hanging frame differs from the Langstroth by its size only, which is 18½x11½; the square or American frame, 12⅝x12⅝; the square Gallup frame, 11¼x11¼.

I have tried these four styles, not with one or two hives of each, but on quantities, and with the Quinby frames I have obtained the best results, not only in honey, but in wintering the bees also. Before going further, I advise all bee-keepers, who

have any taste for or skill in handling tools, to make their hives themselves. This work is not very difficult. When I began to keep bees I bought, in a second-hand store, all the tools I needed, saws, planes, hammer, squares, etc., and I did not find the work either hard or difficult, but, on the contrary, rather pleasant, although I had no skill in carpentering.

A man who lives on a farm is often compelled to stay at home in idleness during the bad weather of winter. Then he will find the work of building hives an agreeable and profitable occupation. A small shop, and the necessary tools for hive-making, will cost but little, and will be found useful in many ways outside of the bee-hive interest.

I will now explain why the Quinby frames prove more profitable when compared to the other sizes. For breeding purposes, the nearer square a frame is the better it suits the queen. When she begins to lay, in the first days of February, and sometimes earlier, to replenish the hive with bees, she places the first eggs in the cells that occupy the middle of the cluster. Then she continues her laying in a circle around the cells containing the first laid until she reaches the edge of the frame. In very shallow frames, after she has filled a circle of the height of the frame, she has to hunt at each round for more cells to lay in. When we consider that a queen in the height of the breeding-season must lay from 2,000 to 3,500 eggs per day, we will readily understand how precious her time is. While she is hunting for more room her eggs drop off, like fruits, and are lost. It is, therefore, evident that the frame must be as nearly square as possible, but with a square frame there is too little room above for the surplus honey, as the hive must of necessity be nearly square also. It therefore becomes necessary to furnish the bees with a hive in which the frames will be of sufficient depth to give the queen a good-sized circle on each, and of sufficient length to allow of a plentiful space over the brood-nest for the surplus apartment.

A very shallow frame, besides breaking the queen's breeding-circle also, has the disadvantage of leaving too little room above the cluster during cold weather for the supply of food. The greater part of the honey has to be put in the rear part of the combs, and in extremely cold weather we have often noticed that colonies died in these shallow hives, because they were unable to reach these stores that were too far on the side, and consequently not warmed by the heat rising from the cluster.

The above reasons are sufficient to show that my preference for the Quinby frame is based upon rational deductions, as well as upon the experience of 30 years of practice.—Prairie Farmer. Hamilton, Ill.

QUESTIONS ABOUT EAST TENNESSEE.

BY H. F. COLEMAN.

Mr. W. R. Ritchie, of North Middletown, Ky., desires me to answer the following questions through the American Bee Journal:

1. In the mountainous parts of East Tennessee, what per cent. of the lands are in cultivation? 2. What are the principal crops and their average yield? 3. What is price of land not improved? 4. How is the country populated? 5. How is the fruit business?

In answer to these questions, I would say that in the rural districts, and to these I presume Mr. R. has reference, not more than 35 per cent. of the lands are in cultivation. In these districts the principal crops are corn, wheat, oats and the grasses. The best lands will yield from 30 to 50 bushels of corn per acre, and wheat and oats in proportion. The poorer lands will not do so well. The price of

unimproved lands on the mountains, range from $2 to $4 per acre. These sections are sparsely settled, but the people in the main are thrifty and prosperous.

The highlands here are well adapted to fruit-raising. Apples and peaches are the principal fruits grown, and they are not excelled by fruits of the same kind grown anywhere in the United States east of the Rocky Mountains. The apple crop has not been a failure but once in more than 20 years.

The honey crop here has never been an entire failure, in my knowledge, and in fair seasons I am sure that with proper management the yield will be enormous. Bee-culture, on the improved plans, is of recent date here, and no fair tests have been made as to what can be done on this line, but this year, with all the early flowers killed by the freeze in March, my yield was 61 pounds per colony—some colonies giving me 140 pounds.

The fruit, locust, redbud, blackberry and poplar blooms—each exceedingly valuable here to bee-keepers—were all killed by the March freeze.

Sneedville, Tenn., Dec. 1.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Fine Weather—Going South.

We are having very fine weather. The little snow we had in November has all disappeared, and the frost in places out of the ground. We are scraping and fixing the road to-day—55° above zero yesterday in the shade. I put my bees into cellars Nov. 8. They are quiet and contented at 40° to 42° above zero.

I intend to start next week on a trip South—to Florida and several Southern States, to reach Beeville, Tex., in time to take in the convention at Mrs. Atchley's place, and get acquainted with our Southern brethren, and their way of bee-keeping. I expect to hear some big, big "blowing up" the country. I will see, and report. C. THEILMAN.

Theilmanton, Minn., Dec. 8.

Wintering Bees in a Cave, Etc.

The past season has been unfavorable for honey in this locality. I secured 400 pounds of comb honey in 1-pound sections from 15 old colonies, and had an increase of 6 swarms. My bees are mostly hybrids—in fact, I think it would be difficult to find any pure blacks here. I had some of Mr. Newman's Italians years ago, when he was editor of the American Bee Journal. I am like some others—for honey I would as soon have the despised blacks.

I have tried cellar-wintering with rather poor results. For the last four years I have wintered my bees in a cave, as I call it. For the benefit of those who might wish to try a plan not very expensive, I will state how I build mine:

Select a rise of ground where surface water will not trouble; dig a trench 4 feet wide and 1½ feet deep, 16 feet long; take 2x6 scantling and place 3 inches from the edge on each side; make rafters of the same material, and place 20 inches apart. Cover tight with boards, put in two ventilators made out of inch boards, 3x4 inches inside, then cover over with one foot of dirt, then again with dimension boards to keep off rain, poultry, etc. Let the ventilators come one or two feet above all; nail a board on top, and bore sufficient holes in below.

I take off the hive-caps and set the hives on top of each other, and place a tenpenny nail under each honey-board. I use the Adam Grimm-Langstroth hive. I then close up the end, put on the same amount of dirt, boards, etc., and do not go near them until the willows blossom in spring.

This cave will hold 30 hives. It has the advantage over cellar-wintering under a residence, of absolute darkness, quietness, and about the same temperature at all times. I put them in Nov. 12 for this year. I took the precaution to see that they had plenty of stores

about Oct. 1. I feed them by putting in full combs of good sealed honey.

I enjoy reading the experience of others, and hope what little I have written will do no harm.

ERASTUS BOWEN.

Columbus, Wis., Nov. 26.

A Beginner's Report.

I am a beginner in the bee-business. I bought 9 colonies last spring, and have 12 now, in good condition for the winter. I obtained 350 pounds of comb honey. Eight of the hives are dovetailed, with Hoffman frames, and they are good. The other four colonies are in box-hives, which I will transfer in the spring. M. T. FOUTS.

Parksville, Tenn., Dec. 10.

Honey Yield Below an Average.

I prize the American Bee Journal very highly. The yield of honey in this section was below an average. I had 75 colonies, spring count, and got 1,000 one-pound sections of honey, and 200 pounds of extracted, which is perhaps about an average of what bees have done here. J. C. LEE.

Brooklyn, Pa., Dec. 2.

An Experience with Bees.

About four years ago I became interested in the honey-bee. I found a colony in a stub limb of a tree. I cut the limb off and brought them home. I thought I would fatten them up for winter, and gave them four or five pounds of liquid sweets in a pan on the ground right in front of the entrance. In a short time the air was filled with thousands of bees. I thought I had a monster. Well, that night all I had left of that colony was the stub limb. I have never tried feeding bees in the air since.

My next experience with bees was this: I climbed a tree 45 feet from the ground, and cut a black colony out, after a hard struggle and many stings. I got them into a hive and carried them home on my back—a distance of four miles. I gave them a set of combs full of bee-moth, and they did not stay with me very long.

I then borrowed "Langstroth on the Honey-Bee," and for the first time my eyes were opened to the mystery and beauties of a bee-hive; since then I have given bees my constant attention. I had 16 colonies the past season, but on account of the drouth they stored but little honey. I sold out the entire outfit, and with one colony I am starting up again with a different hive and system. The hive I now use holds 10 frames with a top-bar 19⅛ inches long and 10 inches deep. FRED E. PAGE.

Byron, Ill., Dec. 8.

A Little Fall-Bloom Honey.

Bees did not do much this season. They got a little honey from fall bloom.

J. H. BROWN.

Prescott, Ariz., Dec. 7.

No Honey and Not Discouraged.

I did not get any honey this year from 70 colonies of bees. They have enough for winter, by feeding some of them. But I will still keep on trying to do better. I think in a few years we will have plenty of alfalfa here. The farmers are trying it some in this neighborhood.

JAMES JARDINE.

Ashland, Nebr., Dec. 13.

Planting Basswood Trees.

I was at the World's Fair last year. Some saw one thing at the Fair and some another. I was breaking in new shoes when I was there, so I did not see all I might have seen. I have noticed in the American Bee Journal some one asking about where to get linden trees. I got a price-list of a nurseryman that I think will answer. Why not all bee-keepers send for such price-list. The one I got lists 4 to 8 inch linden at $1.00 a hundred. Why not each bee-keeper start a small nursery row in his locality, and see to it that the shade-trees that are planted are honey-plants instead of rubbish? We can send for seedlings, give them a little care, and give them away or sell them at a reasonable price, and thus benefit the future bee-keepers, or we may live to get some of it ourselves. H. E. KLOTH.

Blanchester, Ohio, Dec. 11.

Our Young Friend Again.

Since my last letter I have seen only a few letters in the American Bee Journal from us bee boys and girls. But I will write again, anyway, for I was glad to hear from a few.

We have our bees all in the cellar and think they are doing quite well. We have not fed them yet, nor do we expect

to, unless it be in the spring. I did not get a chance to help put them into the cellar this fall, but father said they were nearly all in splendid condition.

I am going to school in a neighboring village this winter, and get home only on Saturdays, but I keep my eye on the American Bee Journal. I would like to hear from some more of the young people through the American Bee Journal this winter. Pens and paper are cheap. Let us see which State in the Union will have the largest representation of young people in the Bee Journal this winter. Now see if Wisconsin doesn't come out ahead. Let's make the editor make the paper larger on our account.

CHAS. W. SANFORD.

Ono, Wis., Dec. 15.

[All right, let's hear from the young bee-keepers of the different families where the Bee Journal is read. Tell us all something about the bees. Maybe the young friends can give the older ones some new and valuable ideas on bee-keeping. We always have room for something good, or new and helpful.—EDITOR.]

Bees Did Well—Late Swarms.

My report for 1894 is this: 1,200 pounds of comb honey, and 400 pounds of extracted, gathered in 25 days—10 days in July and 15 days commencing the 29th of August. The bees have plenty for winter. I had 28 colonies in the spring, and 28 in the fall. One colony swarmed Aug. 29, which gathered enough for winter, and gave me 21 ponnds of comb honey. Also one swarmed Sept. 4, and gathered 22 pounds for winter, and gave me 7 pounds of finished comb honey. If any one has done better in this latitude (38°) I should like to hear from him through the American Bee Journal.

A. D. LORD.

Amiret, Minn., Dec. 13.

Bee-Keeping in Eastern Kansas.

I had intended to meet all of the bee-keeping fraternity of the United States and Canada at St. Joseph in October, but I was prevented by circumstances that I could not control, and went about 100 miles right in the opposite direction. I just consider I perhaps missed the one opportunity of a lifetime, but I *will* go when they have the National at Kansas City or Independence, Mo., *if* it is not too far in the future.

We have had poor honey crops here in eastern Kansas for several years, but we are a hopeful lot—we always think we will do better next year; but we beat Dr. Miller this year. I got an average of a little over 13 pounds to the colony, counting increase and all. I had only one swarm, but made several colonies by dividing.

Our best honey-flow this year was in September and October, and where I live (on Marmaton river) it was all white honey—I think it was from asters—and it is all candied now so hard that I can hardly dig it out with a table-knife.

We are having nice weather yet—no snow or cold weather, and very little rain. The farmers are nearly all plowing, and the corn is mostly all gathered, but, like the honey crop, there was not much of it to gather. But we are working hard to try to do better next year, trusting in the Lord and hard labor to get a crop.

J. C. BALCH.

Bronson, Kans., Dec. 14.

An Old Bee-Keeper's Report.

Next year may be my last for the American Bee Journal. I think that I have taken it about as long as anybody in the country. I think that I took it nearly all of the time it was published in Washington, D. C., and the most, or all, of the time it has been published in Chicago—about 30 years, in all. I am getting too old to take care of bees. I am now in my 85th year, and have kept bees about 50 years. I have put into my cellar 98 colonies, and they seem to be all right yet. In hiving one swarm last summer, I fell out of an apple tree backwards about ten feet, with a swarm in my hands; the bees went all over me, and then they came at me sharp-end first, and they stung me a good many times until I got out of their way.

WM. C. WOLCOTT.

Eldorado, Wis., Dec. 17.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for $1.10.

Great Premiums on page 803!

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Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Oolo.

NEW YORK.—The annual meeting of the Ontario Co., N Y., Bee-Keepers' Association will be held in Canandaigua, N. Y., Jan. 25 and 26, 1895. Come early. Everyone come.
Bellona, N. Y. RUTH E. TAYLOR, Sec.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1½ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.
Indianapolis, Ind.

ONTARIO, CANADA.—The annual meeting of the Ontario Bee-Keepers' Association will be held at Stratford, Jan. 22, 23 and 24, 1895. All bee-keepers are cordially invited to attend. W. COUSE, Sec.
Streetsville, Ont.

PENNSYLVANIA,—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program. C. S. Pizer, Sec.
Franklin, Pa.

KANSAS.—There will be a meeting of the Southeastern Kansas Bee-Keepers' Association on March 16. 1895, at Goodno's Hall, in Bronson, Bourbon Co., Kans. It is the annual meeting, and all members are requested to be present, and all bee-keepers are cordially invited. J. C. BALCH, Sec.
Bronson, Kans.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin NOW to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

MICHIGAN.—The Michigan State Bee-Keepers' Association will hold its annual meeting Wednesday and Thursday, Jan. 2 and 3, 1895, in the city of Detroit. at the Perkins Hotel, cor. of Cass and Grand River Avenues. Rates, $1.25 and $1.50 per day. The former rate if two occupy one room. This will be at a time when railroad rates will probably be one-half fare. W. Z. HUTCHINSON, Sec.
Flint, Mich.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

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J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

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HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & Co., 128 Franklin St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. Co., 423 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & Co., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Honey & Beeswax Market Quotations.

CHICAGO, ILL., Dec. 7.—The trade is taking some comb honey for holiday display. This helps out all the choice lots, which bring 15c. per pound; other grades that are good to choice, 13@14c. The dark grades as usual are slow of sale at 9@10c. Extracted sells chiefly at 6@6½@7c. Very little basswood or clover is offered in 60-lb. tins, two in a case. Such meet with ready sale at top prices.
Beeswax scarce at 28c. R. A. B. & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are not quite as salable; and 2-pound sections are little called for. We quote as follows: 1-pound fancy clover, 13@14c.; 2-pound, 12½@13c.; 1-pound white, 12@12½c.; 2-pound, 12c.; 1-pound fair, 10@11c.; 2-pound, 10@11c.; 1-pound buckwheat, 10@11c.; 2-pound, 9@10c. Extracted, clover and basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 50@60c. per gallon. Beeswax, scarce and in good demand at 29@30c. C. I. & B.

CINCINNATI, O., Dec 8.—There is no change in the market. Demand is good for all kinds in a quiet way. No change in prices. Extracted honey brings 4@7c. Best white comb, 14@16c.
Beeswax is in good demand at 22@27c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, MO., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C.-M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat, 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, @6½c.; buckwheat, 5½@6c. Beeswax, 27@29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Dec. 17.—The demand for honey is very quiet. We quote: Fancy, 13@14c.; choice, 11@12c.; others from 8@10c. Literal amount of stock in market. The prospects are that the demand will be very light until after the holidays. Extracted is moving very slowly at 5@7c. B. & Co.

NEW YORK, N. Y., Nov. 24.—The receipts of comb honey have been very large and exceed those of former years by far. The demand has not been very active of late and there are no signs of improvement. The supply is accumulating and the prices show a downward tendency. We quote: Fancy white, 1-lbs., 13@14c.; fair white, 11@12c.; buckwheat, 10c. Two-pound sections are in very light demand and sell at from 1@2c. a pound less. The market on extracted is quiet, with plenty of supply of all kinds. We quote: White clover and basswood, 6c.; Southern, 50@55c. per gal. Beeswax is firm and in good demand at 30@31c. H. B. & S.

CHICAGO, ILL., Nov. 27.—Up to the present the sales on honey have met with our expectations. We have received considerably more honey than we figured on handling, owing to the short crop report, and we think the early shippers reaped the benefit. However, we are now getting the average price, viz.: Fancy, 15c.; white, No. 1, 14@13c. Extracted, 6@7c.
Beeswax, 28@29c. J. A. L.

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Pease mention the Bee Journal. Nov15

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